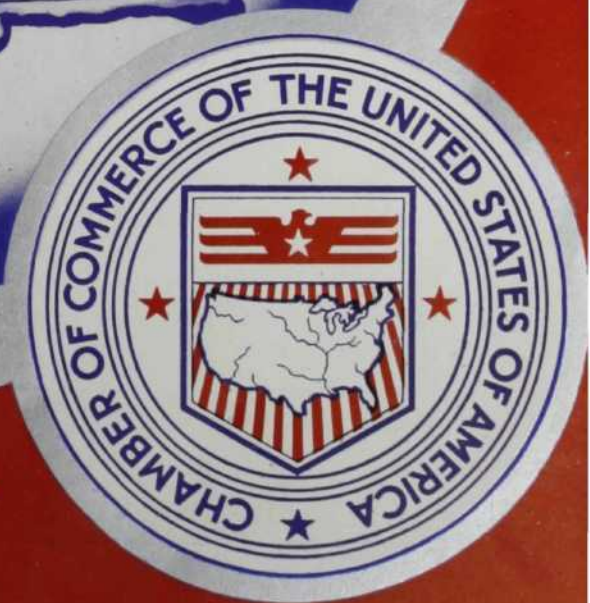


NATION'S BUSINESS

JUNE 1943



United for Victory!



"READING BETWEEN THE LINES OF YOUR BLESSED LETTER..."

"Reading between the lines of your blessed letter, I feel again the warmth of your love, and your unshaken belief in our future together. Just to know there is still in the world such faith as yours is enough to keep me sane. Just to know that you somehow made a happy Christmas for the children is enough to keep hope alive.

"I shared your letter with the others. It's what they live for, too. The knowledge that our wives and mothers and sweethearts are keeping our homes together—while they help to forge the weapons that will some day set us free.

"Reading between the lines of your blessed letter, I know that once again the sirens will howl over Tokio, and bombers will fly so low we'll see the stars on their wings.

"So every day I look to the sky, waiting for them to come again. They will come—no one of us doubts

that, ever. And my faith and hope in you keeps my head up and my heart high, while silently I pray for the day they'll come—to deliver us from evil—to bring me home to you again.

"Home—where I want unchanged, just as I remember them now, all the things that I hold dear. The right of a man to think and speak his thoughts, the right of a man to live and worship as he wants, the right of a man to work and earn a just reward!

"Don't ever let these be lost. Keep everything just as it is until I come back . . . back to America where no armed guard bars the door to liberty . . . where there will never be a barbed wire fence between a man and his opportunity to work and build and grow and make his life worth living—this war worth winning!"

.

NASH-KELVINATOR CORPORATION, DETROIT

Keep their spirits up!
Write letters regularly
to Fighting Men at
Home and Overseas.



NASH   **KELVINATOR**

In War, Builders of Pratt & Whitney Engines and Hamilton Standard Propellers.
In Peace, Nash Automobiles, Kelvinator Refrigerators and Appliances.



We Borrowed Their "Nylons" to Make Tires for the Navy

A typical example of B. F. Goodrich leadership in tires

THINGS are happening in the rubber industry.

New ideas are being born which conserve rubber today—and will save you money tomorrow.

In the B. F. Goodrich laboratories they're trying out dozens and dozens of new methods of tire construction. For example, tires are being built with Nylon cord—as well as of cotton or rayon. Nylon has such great strength that it is possible to build tires with less rubber. Passenger car tires built with only two Nylon plies ran far longer than four-ply conventional type tires when tested for ply separation and overload!

And bruise resistance is so great in airplane tires made with Nylon cord that both the Army and Navy have placed orders for this new type tire

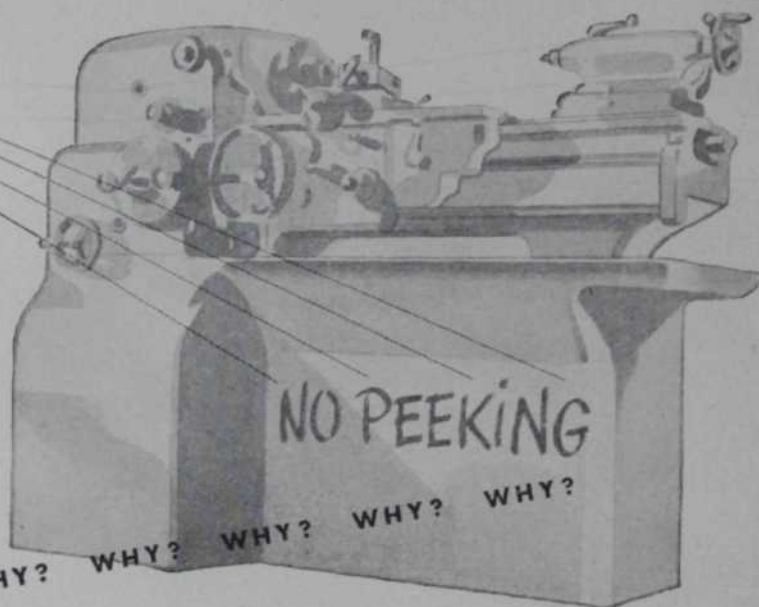
that saves weight and makes landings safer. B. F. Goodrich was the first company to make and deliver such tires to the U. S. Navy.

So the Nylon your wife is *not* getting in the form of hose is going to war. Some of it is being used in experimental work that may save thousands of tons of rubber. Perhaps one day you may be able to buy B. F. Goodrich Silvertowns for trucks with eight plies instead of twelve, that with weight reduced considerably will run cooler at high speeds—all because of today's wartime developments. *Maybe*, we say. For there are still many problems to be solved.

We do know that when this war is over B. F.

Goodrich will offer you far better tires than ever built before Pearl Harbor. Whether they are built with Nylon, rayon, or cotton cord, with crude or synthetic rubber, B. F. Goodrich will be *first* with the new mileage-saving, money-saving developments. In peace as in war, B. F. Goodrich will be "First in Rubber".





WHAT'S SO SECRET ABOUT A MACHINE TOOL, ANYWAY?

Must *Close It Up* also mean *Cover It Up*?

How much easier it would be to inspect and maintain a machine if you could *see through* to vital working parts.

That goes for hobbing, milling, broaching, automatic screw machines . . . for drills, grinders, turbines, looms, gear boxes . . . your own machines.

Why not open them up with glass? Keep an eye on their operation, on wear, on lubrication. Catch the little things before they become big headaches?

Glass is ready to take over such applications. Right now. As a plus to unequaled and lasting transparency, research has fitted glass with an iron constitution, and

has added other amazing qualities which make it ready to do business for you in places you never thought of before.

When you design or redesign *anything* for industry, for the home, or for any structure, just remember that today there is a *transparent* material with unusual qualities of surface hardness, of strength, weathering, and permanence. This material combines a variety of chemical and physical properties found in no other substances. *It's glass. L·O·F Glass* to be precise.

Not the glass of your boyhood. Flat glass has come of age, too.

Won't you write us about any possible use of glass that may appeal to you, no matter how revolutionary or unusual? That's the way to really find out. Libbey-Owens-Ford Glass Company, 1463 Nicholas Building, Toledo, O.

Destructible?

Wood-Metal-Plastics-Glass. No material is indestructible. However, barring unseen conditions, no material will fail on a job in which it has been properly specified and engineered. When our application engineers say "Yes", you can be sure about glass.



LIBBEY·OWENS·FORD

A GREAT NAME IN

Glass



"Just getting the wire laid was a tough problem. Keeping it intact in bombings, shellings and adverse weather is a twenty-four-hour proposition. . . . Wire repair crews are made up of four men. Three stand guard while the other works."

(From story by Sgt. James W. Hurlbut, Marine Corps Combat Correspondent)

Telephone Exchange on Guadalcanal

Marine communications men built it under fire. And it has been kept built. The "Guadalcanal Tel & Tel" covers well over a thousand miles of wire.

That is where some of your telephone material went. It's fighting on other fronts, too. We're getting along with less here so they can have more over there.

Telephone lines are life-lines and production lines in a war. Thanks for helping to keep the Long Distance wires open for vital calls to war-busy centers.

WAR CALLS COME FIRST

BELL TELEPHONE SYSTEM



"CLEAN SWEEP"

WESTERN UNION

CLASS OF SERVICE

This is a full-rate Telegram or Cable Telegram unless otherwise indicated by a symbol in the margin. For a complete list of symbols, see the Western Union Manual.

A. C. WILLIAMS

WASHINGTON

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WU 16 106 GOVT 3 EXTRA=CA WASHINGTON DC MARCH 1 1943 1012A
FAIRBANKS MORSE AND CO.,
BELOIT, WISCONSIN=

DIESEL ENGINES OF YOUR MANUFACTURE POWERED THE US SUBMARINE WAHOO IN HER RECENT SPECTACULAR VICTORIES OFF NORTHERN NEW GUINEA. THE WAHOO SANK A JAP DESTROYER AND TWO DAYS LATER SENT TO THE BOTTOM A FOUR-SHIP ENEMY CONVOY, CONSISTING OF TWO FREIGHTERS, A TRANSPORT LOADED WITH TROOPS AND A TANKER. FOR THIS MAGNIFICENT FEAT THE WAHOO TODAY WEARS A BROOM AT HER CONNING TOWER -- THE NAVY'S TRADITIONAL DECORATION DENOTING A "CLEAN SWEEP". YOU WHO FURNISHED HER FINE DIESELS SHARE IN THE HONOR. THE BUREAU OF SHIPS TAKES PLEASURE IN EXTENDING SINCERE THANKS FOR THIS SPLENDID EQUIPMENT. NAVAL CRAFT AWAIT YOUR ENGINES. KEEP THEM COMING=

E L COCHRAN, REAR ADMIRAL USN. CHIEF OF THE BUREAU OF SHIPS.
1013A

We of Fairbanks-Morse appreciate Admiral Cochran's telegram giving Fairbanks-Morse Diesels a share in the honors won by the illustrious crew of the *Wahoo*. We are proud that our Diesels can serve with men so fearless—and pledge to keep Fairbanks-Morse Diesels coming for Navy craft. Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago, Illinois.



FAIRBANKS-MORSE

DIESEL ENGINES
PUMPS
MOTORS
GENERATORS
SCALES

WATER SYSTEMS
FARM EQUIPMENT
STOKERS
AIR CONDITIONERS
RAILROAD EQUIPMENT



Diesels



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Cover photo by Jaques from Black Star

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Although the editors will make every effort to return unsolicited manuscripts promptly and in good condition, Nation's Business cannot accept responsibility for loss or damage of this material.

... ALL SET,
 EXCEPT FOR
One Part
 YOU CAN'T GET?



Is progress blocked on your new product . . . is your present war production delayed . . . by one difficult part you can't get? Is it difficult to find equipment to make it fast enough, good enough, to the extreme standards of precision demanded in that part? Should special machinery be designed to make it . . . do you seek a qualified source of supply?

CONTACT KAYDON

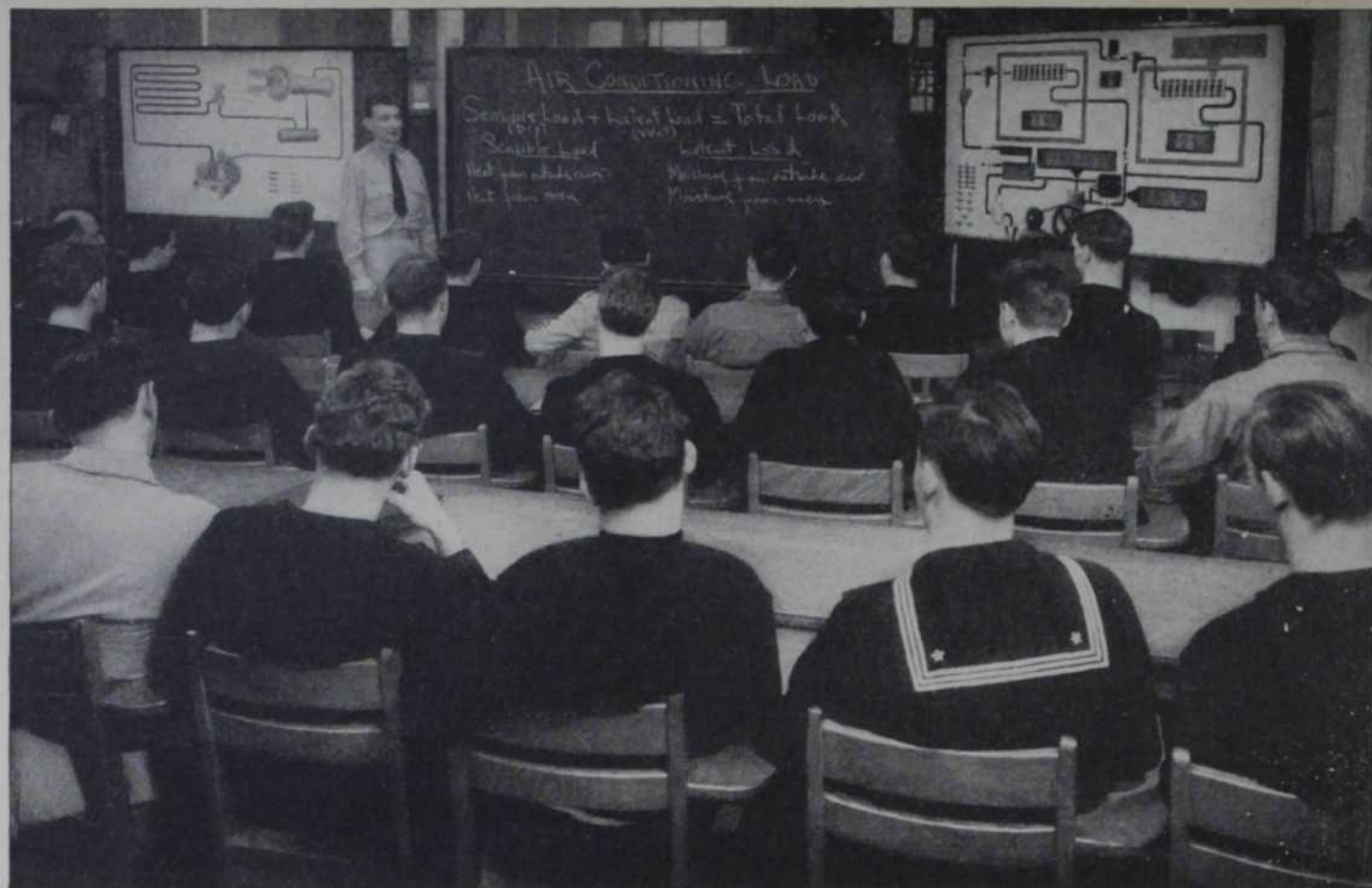
The Kaydon plant is looking for just such problems! Equipped with broad engineering experience and unusual facilities for precision production and technical control, we are qualified to cooperate with your organization in coordinating part design and production methods, to improve use or to speed output. We can make those difficult parts on a high production, low-cost basis, assuring you of the extreme precision, top quality and on-time delivery you demand.

For excellence in production of extremely precise, unusually large ball and roller bearings.



THE KAYDON
 ENGINEERING CORP.
 MUSKEGON, MICHIGAN

Specialists in Difficult Manufacturing



No moss, no ivy, no stein-songs...

but **TRADITION, *plus!***

THE York "university of naval air conditioning" is just two years old . . . ante-dating Pearl Harbor by six months.

Its hundreds of graduates are serving in every quarter of the globe. And the machinist's-mate "freshmen" who come in each six weeks are all naval veterans and most of them have seen action, *plenty!*

Originally planned to train submarine petty officers in the complex air conditioning equipment that makes U. S. submersibles the world's

most efficient, the York school has been expanded to cover all phases of naval refrigeration and air conditioning. From now on not merely submarines, but every type of new vessel of the U. S. Navy, from battleship to fleet tug, will carry one or more of these York alumni! Probably no other seat of learning ever gathered tradition so fast. Perhaps there *ought* to be a song. York Ice Machinery Corporation, York, Pennsylvania.



YORK REFRIGERATION AND AIR CONDITIONING FOR WAR

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885



SOLUTION—

Special Conference Booth Gives "Zone of Quiet"

In round-the-clock production of busy factories, ear-splitting machinery noise is inevitable in many departments. Workers or foremen who have to discuss or explain plans in this din must either resort to Indian sign language or go off to some distant part of the plant in order to make themselves heard.

Burgess acoustic engineers saw the need for a comparatively quiet spot which could be located even in the noisiest manufacturing departments. Using walls of patented Burgess acoustic construction, they perfected a scientifically designed "conference booth" about six feet square. It has two doorless entrances to allow easy access, yet provides a zone of comfortable quiet where men can talk or telephone and be heard clearly. When wartime restrictions are lifted, it will again be available to facilitate production of those new models we're all looking forward to.

BURGESS PIONEERING in acoustic development has provided many other quieting devices to aid the war effort. Over 20 years' experience has made it possible for the Acoustic Division to successfully engineer products ranging from engine exhaust silencers to acoustic office ceilings. Why not write us of your noise difficulties? Acoustic Division engineers may already have worked out the solution to your problem.

BURGESS

Acoustic

DIVISION

Acoustic Division, Burgess Battery Co., 2817-P W. Roscoe St., Chicago



Through the Editor's Specs

E Pluribus Unitas

WE WERE invited by a government agency to make a short-wave broadcast to foreign countries to explain the international currency plans, the *bancor* of Lord Keynes and the *unitas* of Secretary Morgenthau. We declined because we knew so little about them; if we had known less we might have accepted.

We confess with shame that if they add up to horse sense, we don't get it.

The nearest we can make out of *unitas* is that nations stabilize their money but without pooling their resources. Maybe there is a second step which we haven't been told about. We, having the bulk of the world's gold, would contribute generously to this credit pool. Nations would buy from us using our credit. At some point (and this is happily anticipated) there would be an accounting. If a country had overbought, it would be advised by a Super-Board to deflate its currency so the books would balance, a simple operation with 40 or 50 countries involved.

IT IS A MATTER of regret that we cannot become enthusiastic over the economics of the World Planners. In many respects they are at variance with our Domestic Planners. For example, we are horrified at the thought that some bright day our Home Planners, planning an expenditure of billions for domestic prosperity *a la* the Delano-Hansen Board will bring us suddenly face to face with an edict from the Super-Board of the World Planners to the effect that such a policy is *verboten*. We might be told that, instead, we should tighten our belts and not spend, otherwise the rest of the world would not have surpluses. It seems entirely within the cards that our representative on this Super-Board might likewise view with alarm domestic WPA's in Chile or Yugoslavia.

Our predicament is obvious. We have accepted the policy of the bigger the spending, the bigger the borrowing, the bigger the prosperity. Our Berles and Hansens and Delanos have sold a hard-headed and thrifty people this strange device. They have soothed our native apprehension of debt by the simple answer: If we borrow from ourselves, it is not really a debt since we owe it to our-

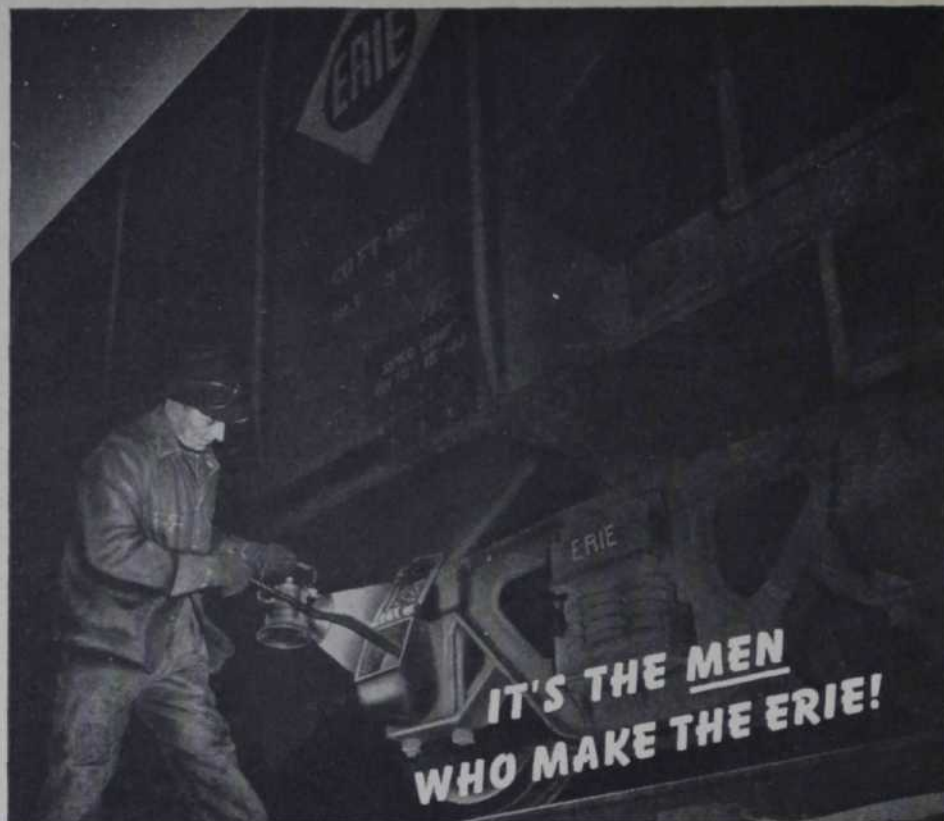
selves. Nothing to worry about, no, sir!

THE CROW WE pick with our New Deal economists is their selfishness. They stultify our Good Neighbor policy. They do not divulge their great discovery to other nations. They keep them in the dark. They do not tell Mexico, Chile, Spain, China, even England, how easy it is. As a result, our Good Neighbors and Allies must undergo the humiliation of coming, hat in hand, to us for loans. They might finance themselves simply by borrowing from themselves. Such action would leave them better off. Debt owed to themselves would be an asset, a national virtue, as our Heavy Thinkers have so diligently pointed out.

It is selfish of us to monopolize this super-economic thought. We ought to sacrifice our advantage for the good of all. If other countries borrowed from themselves it would, true, cut down their debt to us, thus, according to Lord Keynes, decreasing our national assets. But in the interest of humanity and our Good Neighbors, we should forego that advantage. We should let other countries cut a slice of our melon. They would be eternally grateful to us. Such magnanimity on our part might prevent a future war, with all the world arrayed against us, when other countries learn, as they eventually will, how we have monopolized a great economic and fiscal discovery. If we continue our selfish policy, all hell will break loose when the truth comes out and we flaunt in the faces of less benighted countries a cosmic debt of 300 or 400 billions owed to ourselves and on the asset side of the ledger.

We talk post-war of carrying education to the Germans. We send good-will ambassadors all over the world. OWI sends tons of pamphlets and motion pictures, and the air waves are heavy with good-will messages.

But, with a furtiveness unworthy of a Great Nation, we delete, censor, omit any reference to the one piece of good will information that is substantial, effective, morale-building, practical. We do not say to our Allies: "Don't be foolish. Don't keep on building up the United States by borrowing from us. Don't you see, every dollar we go into debt to lend you, only builds up our material strength. We borrow from our-



The Ace Detective Who Never Made an Arrest

YOU'RE standing right in the middle of a great, sprawling, through freight yard at night.

A thousand cars are on the move all around you. And that man there with the lantern . . . he's seeing to it that those thousand cars *keep* moving.

We call him an inspector, but actually he's a detective — a *trouble* detective. It's his job to discover defects in equipment which, if allowed to pass unnoticed, might result in delays or damage to *your* property.

Erie has a staff of these inspectors in every yard. When a train is coming in they station themselves at the side of the track and observe the condition of wheels and other parts as the cars go by. After the train stops a more rigid inspection is made.

You may never see these men. You may never have known they were there. But night and day, summer and winter, they're always on guard protecting lives and property and making possible faster delivery of war materials and essential civilian goods.



AMERICAN RAILROADS AT WAR

THE RAILROAD OF HELPFUL SERVICE

selves. There's a tip. Figure it out for yourself. Sure, our national selfishness will prompt us to keep on lending and leasing and giving to you. But, don't be a Horse and Buggy people. . . ."

No, not a word of this, and yet we boast of a Good Neighbor policy.

Fact vs. impression

THERE is much loose talk, in Washington and elsewhere, about "capital's great war gains." In this connection, the reply of Lewis H. Brown, president of the Johns-Manville Corporation, to a stockholder at the company's recent annual meeting is worth recording. The stockholder wanted to know whether labor's remuneration was keeping step with "capital's great war gains."

Average hourly rates have gone up 39 per cent in the Johns-Manville factory since 1939, and 63 per cent since 1929, Mr. Brown said. In terms of an annual wage, the increase has been 53 per cent since 1939.

"I haven't noticed Johns-Manville Corporation, or any other company, making 53 per cent more profit after taxes than it did in 1939 or in 1929," said Mr. Brown. "As a matter of fact, I have preliminary figures on a survey of 459 manufacturing corporations showing their net profit after taxes for 1939 was \$1,400,000,000, and their net profit after taxes in 1942 was \$1,700,000,000—a \$300,000,000 increase or about 19 per cent. And the 1942 net profit is 22 per cent less than the profit for 1941. So, when you talk about capital's great war gains, I think you are talking about something that is an impression rather than a fact."

Impressions, unfortunately, are sometimes harder to overcome than facts.

Nothing begins at home

IN A single day recently, the Office of War Information handed out 53 separate news releases, one of which urged conservation of paper.

Life's little ironies

AS A CITIZEN you are part of the Government and therefore operate the nation's coal mines. If you apply to your Government for a coal-mining job you, through your agent, Mr. Ickes, will inform yourself that the only way to work in your mines is to get permission, that is, a union card, from John L. Lewis. Don't embarrass yourself or Mr. Ickes by recalling that you, through your Government, gave a solemn promise in 1941 that you would never order a closed shop. If you get a card from Mr. Lewis, you, as part of the Government, will collect from yourself certain union dues and send them on to Mr. Lewis. Mr. Lewis will, or will not, depending on his mood, send a receipt to your Government for the total \$7,000,000 or \$8,000,000 thus collected. Certainly he won't tell you how the money your Government collects from you and hands over to him is spent. But, this need not worry you too much. You can cross that bridge after you get

John's permission to work in your government mine.

Educational notes

POINT system of rationing is now taught in public schools (planning for postwar?); a "propaganda" course for sixth graders is taught in a Maryland school (where Chicago Tribune is presented to the pupils as best example of propaganda in news, and PM, New York silk stocking New Masses, as the ideal); distribution in schools of a 93-page test book, written in part by OPA officials, which praises grade labelling, opposes a sales tax, approves the \$25,000 salary limitation, and criticizes the press and radio.

Nothing to report on increased activity in teaching of American History.

Dog bites man

YESTERDAY'S "miracles of production" become today's commonplace. Not long ago the War Department asked the American Rolling Mill Company to speed up still more its production of spiral-welded pipe. All that management and the workers were told was that a new pipe line was needed for an unnamed battle area. At the end of 30 days the plant had turned out more spiral-welded pipe than ever before in a like period; in one seven-day period the eight-hour production record was broken six times.

The country takes this kind of management-labor teamwork for granted in most of war industry. Only the rare exceptions to the rule are now treated as news. And that's a real tribute to the home front.

Importing Germany's din

THE GERMANS beat OPA to the punch by several years in standardizing consumer items and warring against trade names and labels. Their equivalent to OPA is Deutsche Industrie Norm, through which the Germans propose to apply a Prussian uniformity to everything the consumer buys. It's part of the Hitler plan for ruling the world.

In this country, the OPA proposed a similar uniformity under the name of "grade labeling," allegedly as a war measure and to "simplify pricing and packaging." Grade labeling, according to the Office of Civilian Defense, is "a necessary part of price control." The pamphlet urges consumers to let OPA know that they want grade labeling. The New York Times editorially asks just what this has to do with preparation against bombing of New York.

Seems a fair question.

Who's checking whom?

FOR YEARS, labor leaders have explained various excesses and unpalatable policies by saying they are unable to hold the rank and file in check. Occasionally something happens to take the wind out of this proposition—such as the rank and file's refusal to strike last month at



PURE WATER—more vital to health than oil to a machine

WORKERS in war plants—all of us subject to the tensions and strain of wartime—are more than ever dependent, for health and efficiency, on an abundant supply of pure running water.

* * *

Your community water works is probably rendering good service in spite of wartime shortages in materials and war-deferred plans for improvements and extensions. Vital as they are to public health, water works and sewage works construction, as well as stream pollution abatement, have been largely deferred for the duration. Projects amounting to upwards of a billion dollars are in abeyance.

An informed public will insist that these vital services be constructed or restored to full efficiency as soon as possible after the war's end.

* * *

We publish this message in the public interest since our product—cast iron pipe—is used almost wholly in the public service. More than 95 per cent of this country's water mains are cast iron pipe which serves for more than a century.

NO. 1 TAX SAVER



Pipe bearing the above mark is cast iron pipe. Made in sizes from 1 1/4 to 84 inches.

CAST IRON PIPE

RESEARCH ASSOCIATION, CHICAGO



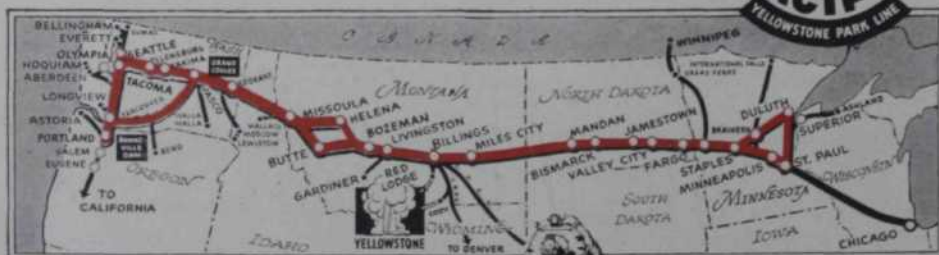
How many ears has a general?

As many as he has portable field telephones, "walkie-talkies", radios, flashlights, blinker lights, many another ingenious electrical invention. These are the "ears" that enable officers in the field to direct and coordinate actions taking place hundreds of miles apart.

Power for most of this communications equipment comes from light, compact dry cells made with manganese dioxide.

Before the war 75% of the ore used in making dry cells was obtained from regions in the African and Australian war zones, but today America's entire supply comes from Montana manganese dioxide producers served exclusively by Northern Pacific.

Each month, tons of this vital war material roll eastward over Northern Pacific rails to dry battery manufacturers in the East, illustrating anew why this railway has become known far and wide as "The Main Street of the Northwest".



"MAIN STREET OF THE NORTHWEST"

the Thompson Products Company, which makes essential airplane equipment.

The CIO called the strike, but the union members shoved right through the picket lines and the strike flopped. A reporter quoted one woman worker as telling a picket that if her husband, in North Africa, knew she was on strike "he would blow my head off." An elderly man, significantly swinging a hammer, displayed a pair of Army wings, worn in honor of his boy in the Army Air Corps. Pretty soon the picket line melted, and the CIO called off the strike. In this case, the rank and file checked the leaders.

From the bottom up

IT ISN'T easy these days for top management to keep personal touch with employees in America's far-flung business enterprises. "Fitz" Hall, president of the Nashville, Chattanooga & St. Louis Railway, does it in part through short, personal messages which he distributes among the railroad's employees. No. 244 in his series of bulletins comes to hand, emphasizing that only under free enterprise can workers rise to the top through merit, and receive rewards in accordance with their efforts.

Mr. Hall points out that Ben Fairless, president of U. S. Steel, is the son of a Pennsylvania coal miner. Jim Hill, president of the Louisville & Nashville Railroad Company, came from a family of moderate means in Tennessee. Martin W. Clement, president of the Pennsylvania Railroad, started work for that company as a rodman. The list could be extended indefinitely.

"Strong men, honorable men, self-respecting men only want what they themselves earn—but they do want that," says Mr. Hall. "And the only way to get that is to keep the American free enterprise system. Improve it if we can, but keep it, or else America will go the way of Rome."

Horticultural hazards

FOR a whole month, now, we've been waiting for the Government to decide whether it wants us to go ahead with our Victory Garden, as urged by Secretary Wickard, or drop it and go fishing, as advised by Professor Richards, head of OPA's gas rationing section. There is still no word from High Authority, but a recent bulletin from the Northwestern National Life Insurance Company is swinging us toward rod and reel.

It is inadvisable, the bulletin says, to rush through a big dinner and then work head downward in the garden till night-fall. Gardeners must be sure to scrub their hands thoroughly with hot water and soap after using insecticides. Care must be taken not to get garden chemicals into cuts or open blisters. Skin irritations resulting from allergies common with many people are another hazard, along with sunburn, up-turned rakes, and risks to the feet from spading.

All things considered, the Government's "go-fishing" advice sounds more attractive.

Whirlwind's BROTHER

IT'S a 2-to-1 bet that your home electricity is born in a man-made hurricane five times as ferocious as any Nature ever cooked up. Engineers call it a steam turbine-generator.

A steam turbine is a kind of cross between a mammoth windmill and a giant's spinning top. It takes steam hot enough to heat the pipes a dull red, and squeezes the energy out of it until, 1/30 of a second later, all that's left is water too cool to bathe the baby in. The turbine turns a generator which passes this energy on to you as electricity—so you can use it to cook an egg, or freeze ice cubes, or make bombs to blast the Axis.

This machine isn't the sort of job that a manual training

class would turn out! Just one part, small enough to hold in your hand, may handle more power than a dozen trucks. And the steam takes the turbine rotor for such a dizzy ride that if it were turned loose on the Atlantic seaboard, it would roll to San Francisco in four hours!

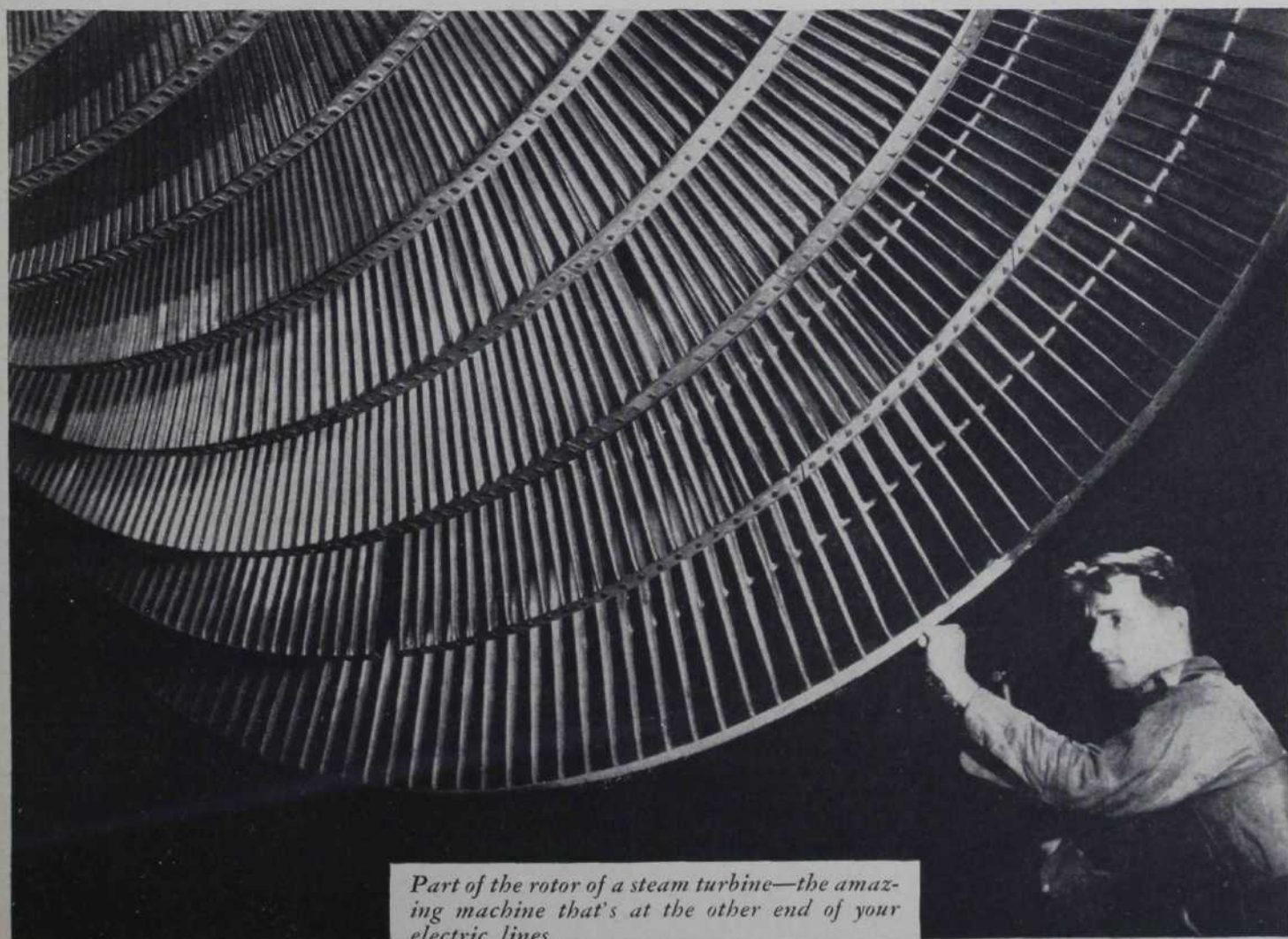
Today's turbine-generators turn out, from one ton of coal, more electricity than three tons used to give. That saved America millions of tons last year, plus precious man-hours in mining and transportation—all because G-E engineers, along with boiler and power-plant designers and engineers of electric service companies, have been improving turbines for 40 years.

More important yet, they have given us a wonderfully efficient machine to drive our ships of war—drive them faster and farther than those of our enemies.

War cannot destroy the ingenuity and experience that created the modern turbine—in fact, it stimulates them. And they will help to create for us better and richer lives in the peaceful years to come. *General Electric Co., Schenectady, N. Y.*

★ ★ ★

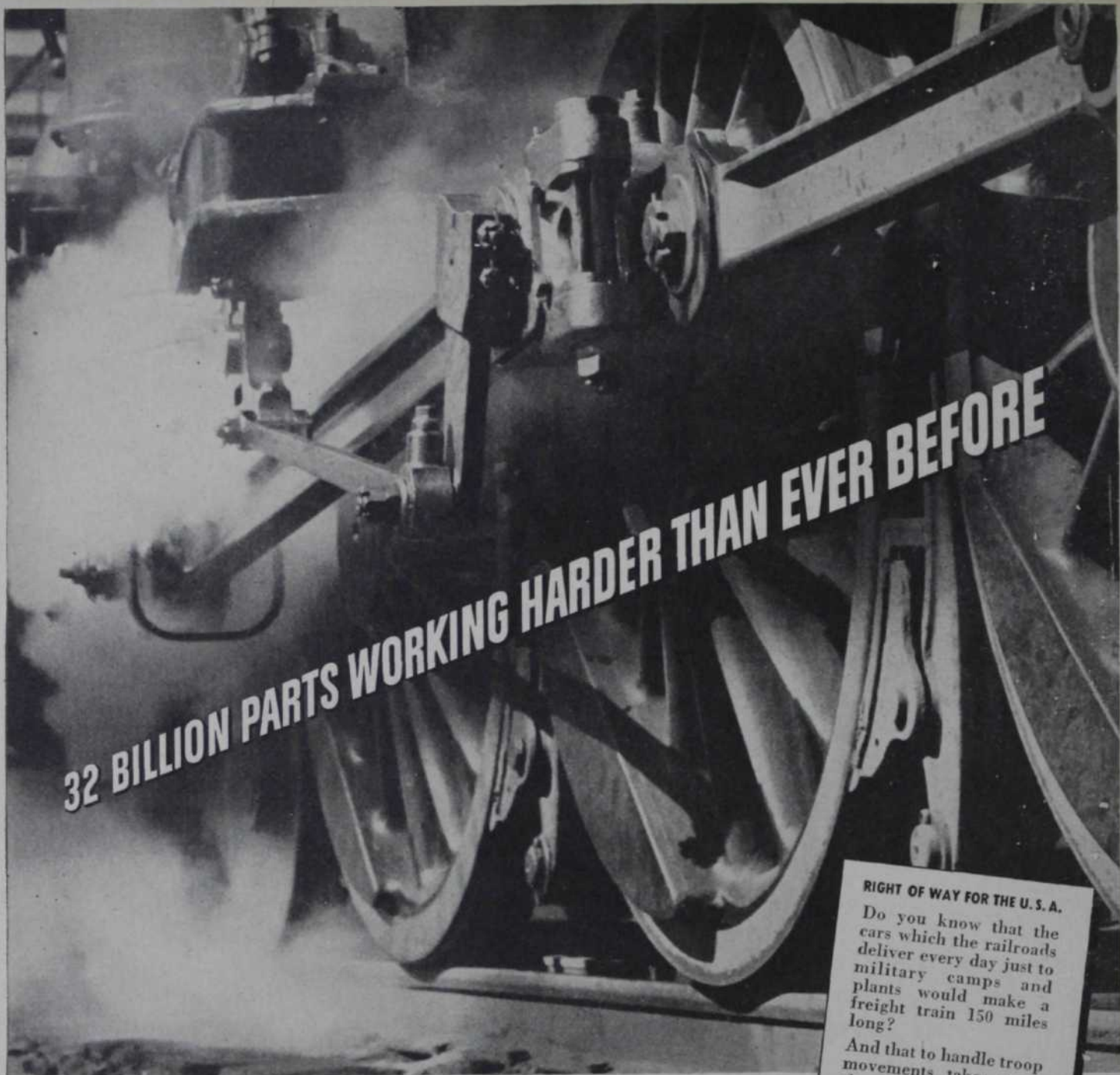
Listen to the "Hour of Charm" at 10:00 p.m. EWT, Sundays, over the NBC network and the G-E news program with Frazier Hunt at 6:00 p.m. EWT on Tuesdays, Thursdays, and Saturdays over the CBS and American (FM) networks.



Part of the rotor of a steam turbine—the amazing machine that's at the other end of your electric lines.

GENERAL  ELECTRIC

952-452C-211



32 BILLION PARTS WORKING HARDER THAN EVER BEFORE

Maybe this will give you an idea of what the railroads are up against –

There are 32 *billion* parts in all the cars and locomotives now in service – 32 billion parts that have to work together and hold together to keep America's wartime traffic rolling.

And no matter how much we need new equipment – the hard fact is that all the material we can get today cannot add up to much against such a total.

So the job confronting the railroads is the same confronting most Americans – the job of doing the best it is humanly possible to do with what we have and can get.

It's a fortunate thing, under the circumstances, that the American railroads worked out in peacetime the teamwork they're putting to such good use today. Any freight car in America can be repaired in any

railroad shop in America – wherever it happens to be – without the delay of getting back to "home base."

This is only one example of the cooperation among the nation's railroads, and of the broader cooperation among railroads, shippers and the government – all working together and pulling together to handle the biggest transportation job the world has ever seen.

RIGHT OF WAY FOR THE U. S. A.

Do you know that the cars which the railroads deliver every day just to military camps and plants would make a freight train 150 miles long?

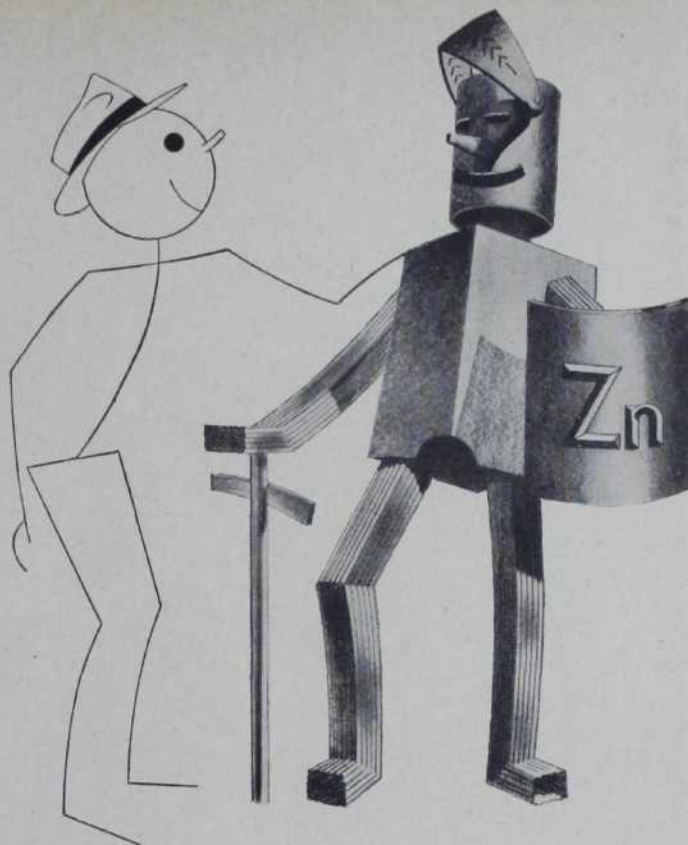
And that to handle troop movements takes more than 200 special trains a day?

This is something to remember when trains are held up to make way for victory freight, or cars are crowded, or reservations hard to get.

AMERICAN RAILROADS
ASSOCIATION OF

ALL UNITED FOR VICTORY

**WE HAVE
THIS TO SAY
ABOUT
ZINC**



We like zinc.

In fact, we recommend it regularly, not just as a war emergency, mind you, but as a standard prescription to be taken side-by-side with aluminum in certain chemical applications.

What's more, we put a modicum of zinc into a few of our good Alcoa Aluminum Alloys, to make them do certain things better.

There isn't any battle of metals that we know anything about, either past or future.

The real battle ahead is industry's task of making jobs when this thing is over. If making a part out of zinc, for instance, will make more people buy it and create more jobs, then zinc it ought to be.

That is another way of saying you ought to be curious about zinc, really curious, if you are one of the Imagineers who are springing up by the thousands. These are the men who are letting their imagination soar,

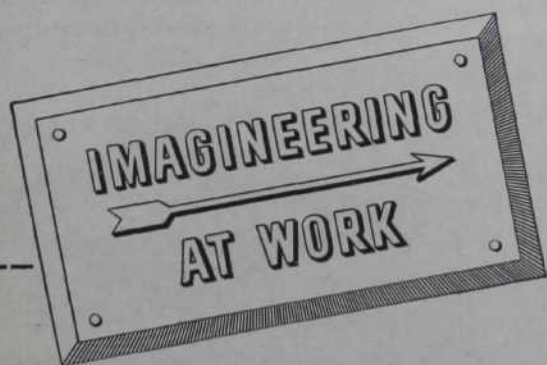
and then engineering it down to earth, *getting ready*.

We believe the practice of Imagineering is one spark that will light the flame of the fifty-five million jobs needed after the war. We believe in Imagineering with every known material and every war-born scientific development you can get an inkle of.

Sooner or later every Imagineer must come smack up against the potentialities of Alcoa Aluminum, the import of new levels of cost, new techniques, and new alloys. You won't find the answer to everything in Alcoa Aluminum, but you will find some magnificent surprises.

Many Imagineers have already told us so. And with the help of such advice on Alcoa Aluminum as we can squeeze in the time to give, they are already several steps along in their postwar plans.

ALUMINUM COMPANY OF AMERICA, 2125 Gulf Building, Pittsburgh, Pennsylvania.



Alcoa Aluminum





This bird-cage is built to catch sharks!

ANOTHER REASON FOR GOODYEAR LEADERSHIP

A YEAR AGO the eastern coastline of our country was infested by "sharks" of a vicious variety . . . sharks which brought flaming death to many American ships and seamen.

Today it is very unhealthy for those same sharks, thanks in large measure to the ceaseless patrolling of our shores by blimps . . . termed, by a spokesman of the U. S. Navy, "the natural enemy of the U-boat."

This is good news for all America, but it particularly warms the hearts of Goodyear people. For this is fulfillment of a faith. More than thirty years ago Goodyear began to build

and fly balloons and airships. It has never stopped. Through the dark days, when many gave up lighter-than-air craft, Goodyear carried on . . . keeping the nation's only technical staff intact . . . maintaining continuous research . . . storing up a vast reservoir of skills and experience unequaled anywhere.

Thus, when the enemy struck without warning, Goodyear was able to build airships for the Navy, and help train pilots to operate them. Today, because some one had faith, the shore line of America is safer, and the future of free men brighter.

A pioneer in rubber, Goodyear also works in metals, chemicals, aircraft and is one of the world's largest producers of fabrics. Serving the nation today, Goodyear will have many interesting new products for you tomorrow.



THE GREATEST NAME IN RUBBER

NATION'S BUSINESS for June, 1943

Must the People Muddle Through?

THE STATE of the national morale is better than our federal authorities have any right to expect. Conflicting directives and exhortations, indicative of a muddled leadership, contrast strikingly with 130,000,000 citizens manifesting a unity truly remarkable under the circumstances.

In two weeks the public oversubscribed a \$13,000,000,000 war loan by 40 per cent—more bonds bought in 14 days than in all 1917 and 1918.

During the same two weeks, in contrast to this singleness of purpose and sacrifice, our federal directors and their agencies likewise broke a record of sorts:

The Jeffers-Nelson-Patterson-Forrestal-Ickes controversy over rubber; O.W.I. *vs.* Army and Navy over news and O.W.I. inside fight on propaganda; Truman Committee *vs.* Knox on shipping losses; Labor Board and Byrnes on Little Steel formula; McNutt *vs.* Stimson on compulsory *vs.* volunteer service; Nelson, Wickard, Davis on farm machinery; Prentiss Brown *vs.* the "old Henderson crowd" on prices and how to administer them; Morgenthau, Paul *vs.* Congress on taxes, and a score of other conflicting policies and practices only too well known to the public.

The latest Truman Committee report calls for an end to "destructive wasteful feuding." It recommends that "heads be knocked together." It calls the present confusion the "basic weakness in the control of the war effort."

While federal agencies plan in the grand manner for post war coordination of 50-odd nations, is it too much to ask that a little attention be given to coordination on the home front?

The task should not be too difficult. Here we have a homogeneous people, speaking one lan-

guage, with similar customs and traditions, a people faced with a war of survival, a people generous in its willingness to be led.

In comparison it should be an easy job to move from *bancor* and *unitas* plans of the future to domestic planning for fellow citizens, here, now, today. Our Global Planners might help mother plan how to get a chicken and/or potatoes for Sunday's dinner; or help her grocer plan his spinach order while waiting for an announced amended directive; or help father plan on a cultivator or a corn-sheller, or the married son plan on when the Army may want him.

Can it be that the self-interest so apparent in Washington has gotten beyond control? One group which should be thinking solely of supplying our armed forces keeps an eye cocked toward election next year. Others insist that pet ideas of social and economic "reform" must take equal place with what they term the "war effort." Still other bureaucrats strive to build up their bureaus so big, and so enmesh them in our way of life, that both the bureaus and the said bureaucrats will be essential, even indispensable, when peace comes.

Caught in this vortex are 130,000,000 loyal, self-sacrificing citizens, who, planless, but with a singleness of purpose, are providing the fighters, the ammunition, and the spirit of victory. They deserve better at the hands of administrative heads in Washington.

The President once asked for assistants with a passion for anonymity. The clear call today is for assistants with a passion for unanimity.

Meree Thorne



They Can't Torpedo Truck-Trailers! ...SO, WE'RE GETTING OUR **TITANIUM** AT HOME

WHEN THE U-BOATS began to prowl, we could no longer look to India as the major source for titanium, needed as the base for paint for our ships, tanks and planes.

But American industry quickly solved that one, too. Iron deposits in northern New York, previously undeveloped because the ore was difficult to process, also contained ilmenite, from which titanium is derived. Maybe modern separation methods would solve the problem? *They did* . . . and the ilmenite deposit proved gratifyingly rich and extensive.

Then . . . how to get it out? The

mines are near Mount Marcy, highest peak in the Adirondacks . . . thirty miles from a railroad in possibly the wildest, most inaccessible area in the East. Moreover, ilmenite concentrate is a fine-grained sand. And it's heavy . . . twice the specific gravity of coal.

As in so many other tough jobs, *Truck-Trailers proved to be the answer!* A fleet of thirty Fruehauf Trailers, each making seven to eight round trips daily and traveling 400 miles or more, carries both the ilmenite and the co-product iron ore thirty miles to the nearest rail outlet. Each Trailer carries

a 26,000-pound load, pulled by an economical 3 to 5-ton truck. Every day, about 800 tons of ilmenite and 1,500 tons of iron ore start to war. Now our titanium from this one source supplies the domestic demand . . . another victory for American enterprise.

Truck-Trailers, besides handling this critical job with speed and flexibility, also do it economically. Since a truck can *pull*, on a Trailer, a far bigger load than it can *carry*, operators of this fleet estimate that they are saving up to one-third in manpower, tires, gasoline and power units.

THE MINES which are now our major source of titanium are owned and operated by the National Lead Company, which acquired them recently. First opened in 1826, they were neglected over long periods because of an "impurity" in the ore . . . titanium, which is now the principal product of the mine. Authorities estimate that this titanium deposit will meet our needs for 10 years.

Why is Titanium so useful?

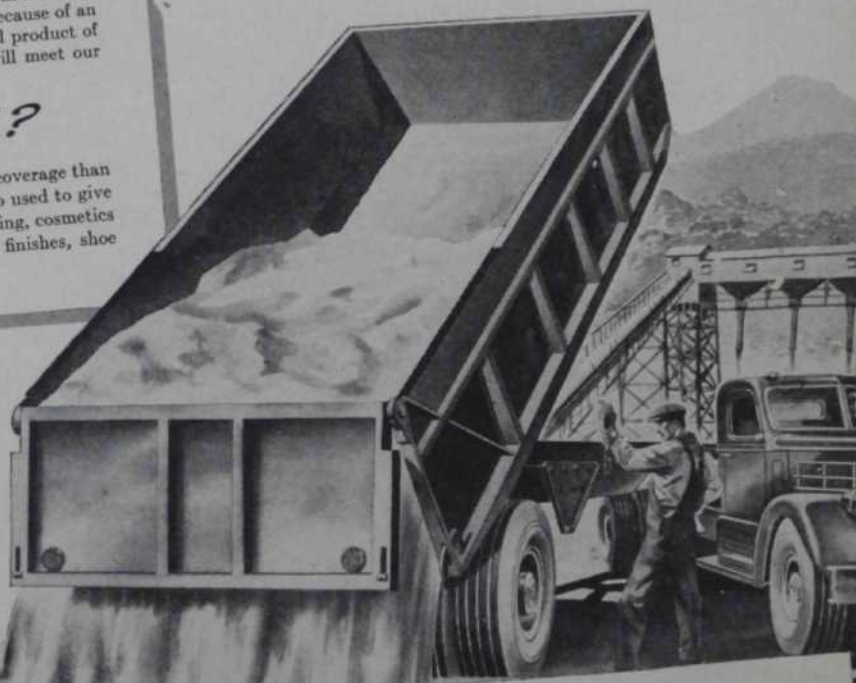
Titanium-base paint will spread much farther with equal coverage than that made from other pigments. Titanium pigments are also used to give whiteness and brightness in paper, asbestos shingles and siding, cosmetics and toilet soap, rayon, linoleum, plastics, rubber, leather finishes, shoe cleaners and polishes, wallboard and many other products.

★ ★ ★ **FRUEHAUF SERVICE**

Keeps Trailers Running!

Trailer operators know that Fruehaufs require little service attention, but when it is needed, there's a Factory Branch Service Station conveniently close. Fruehauf maintains the only nation-wide Trailer service organization, with fully equipped shops and complete parts stocks in more than fifty strategically located cities.

World's Largest Builders of Truck-Trailers
FRUEHAUF TRAILER COMPANY • DETROIT
Member Automotive Council for War Production



FRUEHAUF Trailers
"ENGINEERED TRANSPORTATION"
REG. U.S. PAT. OFF.

**TRUCK-TRAILER TRANSPORT IS DOING
AN ESSENTIAL JOB FOR ALL AMERICA**

MANAGEMENT'S

Washington LETTER

A last minute roundup by a staff of Washington
observers of government and business

CONFUSION FROM ONE END OF THE WAR-TIME administration to the other is increasing, not abating.

Situation appears to be heading for another crisis with more heads about to roll.

Then new faces, a fresh start, but continuance of the same lack of strong direction that will set the scene for the next upheaval.

Labor, management, consumers alike are in arms about the confusion. So are all factions within the Administration. The chaos is the same, inside and out.

Donald Nelson has been "killed off" as often as Madam Perkins, but insiders are saying again that he can't last.

Sharp criticism of his work in the Truman Committee report hurt him.

His own admission that his civilian supply branch hadn't done a good job, made during a Maloney Bill hearing, didn't help.

Arthur D. Whiteside, former Dun & Bradstreet president, called in by Nelson in an eleventh hour attempt to hold civilian supply in WPB, hadn't been in town 24 hours before he was deep inside a stew he didn't help make.

Senate members jumped him because of Nelson's attitude toward the Maloney Bill (to create separate civilian supply authority).

Rubber Director Jeffers jumped him because of an executive order giving Whiteside rationing authority on rubber. Jeffers got it back.

Old standbys in OPA have been job-hunting for a month, saying they wanted to get out before the crash.

Business men dealing with top war-time agencies say the turnover has become so great they often can't find anyone they know, or anyone who knows anything about the subject on which they want action.

▶ Smaller industry the country over still is complaining it is not being given its proportionate share of the war job.

Other criticisms:

The Government's own plants and the Government itself are pirating and hoarding labor while trying to bring public scorn on private plants accused of doing the same thing.

Administration is still courting labor at the cost of production, allowing organized labor leaders to make a grab bag of the war.

WPB spends too much time wrestling for power, too little planning and directing war production.

▶ Don't base any plans for non-war production on the use of men or materials freed by cut-backs or other adjustments of armament schedules.

Production changes in the visible future—and that includes ALL of this year and some of next—will NOT free either men or materials.

That's the last word from men who know the whole picture.

War will take all available men and materials despite changes in production schedules, they say.

Military needs plus commitments to Allies already exceed our materials stocks, probably are above our ability to produce.

Even downward revision of plans does not necessarily mean facilities left over.

For example: Cut in the 1943 airplane goal from 125,000 to 75,000 planes will not free materials and manpower that might have gone into 50,000 planes.

More likely indication is that materials and manpower at hand have been measured, have been concentrated on the number of planes that will absorb all of both.

▶ Draft boards have done a good job, but varied interpretations of instructions, regulations, policies, have left from ten to 15 per cent of their registrants overlooked or in wrong classifications.

This finding of Selective Service auditors has brought plans for a nation-wide check of draft classifications.

It is expected to turn up an added group of selectees which may run as high as ten per cent of total registration.

This audit plus the slow-down in draft calls which has occurred in the past 30 to 60 days, depending on locality, will delay draft of fathers.

General Hershey's last word on fathers was August. His aim was high. Best bet now is fall, maybe winter.

► An all-out campaign to enlist women war production workers will blaze across the nation in September.

Magazine covers, billboards, newspaper ads, posters, booklets, other outlets will tell women it is their patriotic duty to go to work.

They will be urged to go into civilian lines, as well as strictly war work.

Sponsor of the drive is War Manpower Commission. Plans are being laid by OWI and the Advertising Council. A well-known national advertising agency will direct the campaign, without charge.

Private industry is being canvassed to foot the bill.

► Should government make a profit on war risk insurance?

There's an undercover battle in progress over that question. It will bubble out on the surface this month.

Here's the background: In the six months following Pearl Harbor, RFC's War Risk Damage Corporation issued blanket insurance, without premiums.

It also gathered up about \$66,000,000 in claims, arising mostly in Hawaii and the Philippines. Few have been paid.

Since July 1, 1942, the Corporation has issued premium policies, collected \$130,000,000, covered more than \$100,000,000,000 worth of property, chiefly along the east and west coasts and in the Hawaiian Islands.

Government plan is to pay old claims out of new premiums, show a profit.

Bill in Congress would ban RFC profit, force it to waive second-year premium payments but continue coverage.

James S. Kemper, former U. S. Chamber president, heads a fast growing move to require RFC to hang onto its premium income, return it to policy holders if no serious losses occur.

American Bankers Association is backing Kemper's stand. Other support is lining up.

► Experts touring the war production front report a sharp and continuing rise in manufacturing plant efficiency.

This brings out more war materials, but it also makes the cost accountant's job tougher.

A plane, gun or ship completed this week costs less than the one finished last week.

Many plants say the upward curve in efficiency makes it impossible to calculate costs, profits, renegotiation figures.

A few "bad spots" exist, but these usually are in plants just coming into production, using inexperienced workers.

► Germany will crack up in September—or November—or this year, or next year. It all depends on which expert is telling it.

"Good authority" may be found for each guess.

Insiders say facts are that bombings have seriously crippled Germany's war factories, transportation system.

Loss of life within the Reich has been high, morale seriously lowered. Precise bombing of rail engines, important junctions, has had far-reaching effect on production and distribution.

Luftwaffe is not in hiding, they say, but has crashed under Allied plane and anti-aircraft cannon.

But, say these same insiders, the collapse will come not this year, but next.

► Hang your clothes on a hickory limb, but don't go near the water.

Farm experts say WPB's farm machinery order is just like the old song—the agency announced the go ahead signal, but didn't allocate materials to enable the manufacturers to carry it out.

These experts denounce WPB's "bad faith," say one branch authorized an increase, but another is making searching, extensive surveys to determine the need before releasing materials.

This delay is the darkest part of the farm picture, they say, and casts doubt on the possibility of getting harvest machinery in time for this year's crops.

Also on the gloomy side of the food outlook is weather. So far it has been too cold, too dry or too wet.

Look carefully at meat supply figures. Those in close contact with the market say there will be enough animals, but not enough meat. Feed will run short.

► America's policy of accumulating gold instead of goods produced abroad has been a major cause of world economic

chaos, several members have told the British Parliament.

This blame-placing has come during discussion of the Keynes plan for an international trade clearing union involving the use of "bancor" as a world trade monetary unit.

Observers say leaders of Parliament have made it clear they will support the Keynes idea against the American proposal announced by Henry Morgenthau, Jr.

In explaining the Keynes plan, Chancellor of the Exchequer Sir Kingsley Wood told Commons that holders of gold, such as America, could use their gold balance accounts in world trade.

Yet, he added, nations without gold could trade on an equal basis with them through the use of bancor.

► Talk of a coming need of risk capital is sweeping through congressional chambers like a fresh June breeze.

Alert Congressmen are discussing it, coupling it with a postwar need for new jobs.

"Risk capital makes new jobs" is a revived expression.

Current conversations indicate a growing tendency to encourage risk capital by offering special tax inducements.

► Pressure from Capitol Hill is credited with prompting a War Labor Board decision to consider complaints only from unions which represent a majority of the workers affected.

Minority unions and those which cannot prove claims of majority representation will be told to take their complaints to the NLRB.

Significant note: Under this policy more labor cases will be considered under law. NLRB was set up under an act of Congress, WLB by executive order.

► A federal board that can reverse itself once can reverse itself again.

Remember this in connection with NLRB's recent reversal of its earlier decision giving foremen and supervisors full union status under the Wagner Act.

Now board holds that foremen and supervisors are management representatives, and that while they may join a union if they choose, they are not entitled to Wagner Act protection.

A change of one vote on the board brought the reversal. Another change of

a single vote could swing it back to its earlier position.

► Investigators for the Byrd-Vandenberg committee on non-essential expenditures have been inquiring quietly into government corporations.

Such an inquiry is a usual preliminary to full-scale investigation.

They find the Administration has set up 50 corporations. They had never heard of many of them.

These corporations employ 109,519 persons, have a monthly pay roll of \$119,-000,000. Thirty-one of them are not audited by the General Accounting Office.

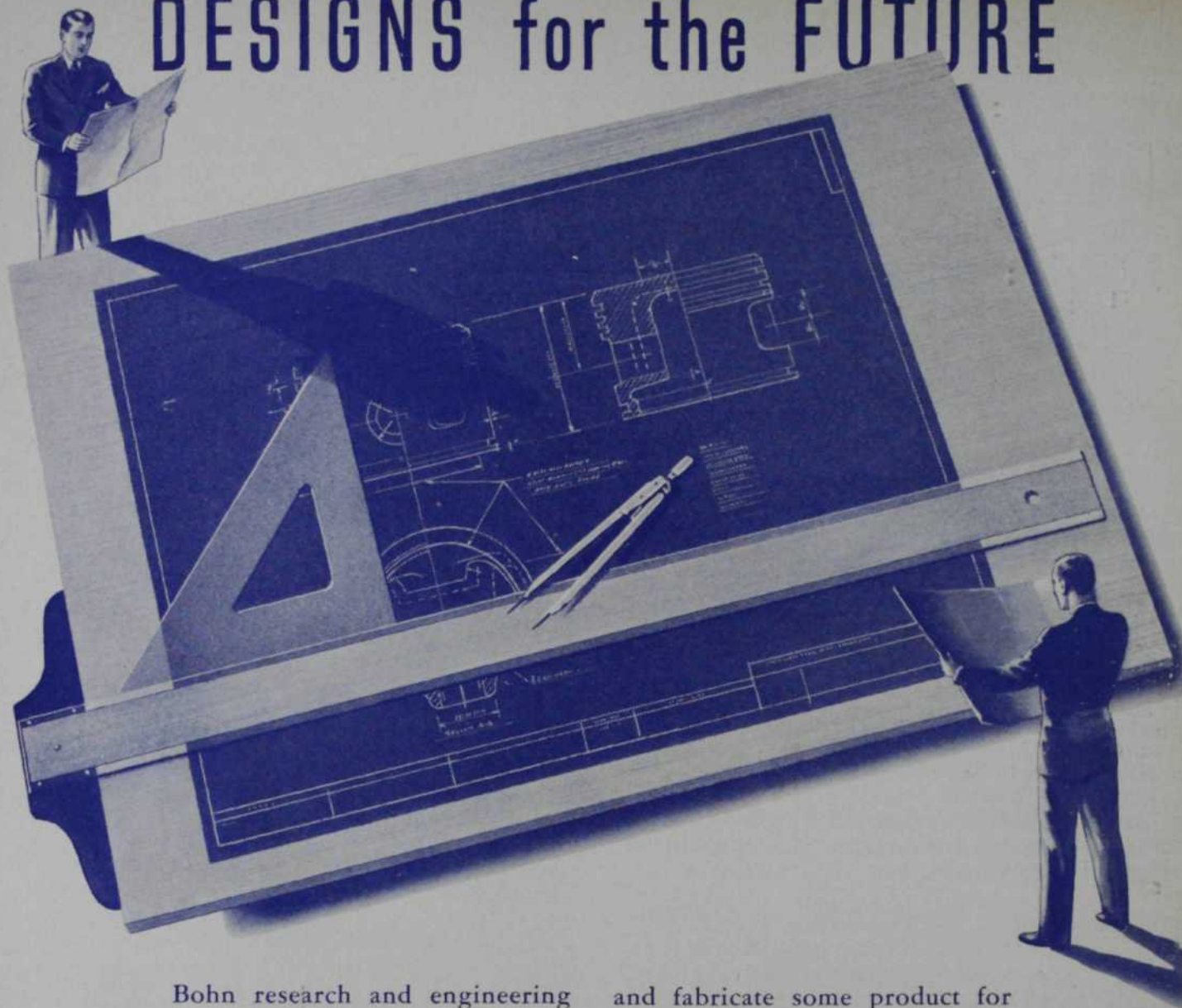
► Adoption of Senator Styles Bridges' proposal to lift the tax on life insurance premiums is listed on the Hill as a sure bet.

The bill would allow as an income tax deduction premiums on life insurance policies in force on December 7, 1941—up to \$1,000 or ten per cent of net income, whichever is lower.

Supporters of the measure are mustering widespread support.

TOO LATE TO CLASSIFY: Government claims to have saved \$2,500,000,000 through renegotiation, but actual savings are about ten per cent of that. The rest would have returned to Treasury as taxes anyway....OPA wants 1,400 more investigators....Most valuable victory garden site in town is that on which Economic Stabilizer and Mrs. James Byrnes pick weeds. It's on the Byrnes' vacant lot on fashionable Sheridan Circle, assessed at \$36,000....Wendell Willkie's book "One World" has reached the 1,000,000 sales mark. The publisher has had only two greater successes: "How to Win Friends and Influence People" and "Your Income Tax"....Railroads are using 16 per cent less coal than during World War I to haul the same weight the same distance....Nearly half the farms changing hands in U.S. are being bought by city folks....New quarters of the Bolivian Embassy were once the James J. Davis home....Pasadena, Calif., city fathers had trouble getting lawn mowers and men, so they bought 50 sheep to mow the grass in city parks....Thirty "old" New Dealers had an old-times party for James J. Farley on his Washington visit....Supreme Court Justice William O. Douglas is making speeches to promote War Bond sales....Newspapers report real estate agents still showing Secretary of War Stimson's \$1,000,000 home, interpret this as evidence of a coming Cabinet change....

DESIGNS for the FUTURE



Bohn research and engineering have developed many non-ferrous improvements. Each one of these steps is of far-reaching importance to industrial America.

Business leaders more and more consult this organization because of our advanced knowledge and wide experience. Maybe some day, Bohn engineers can design

and fabricate some product for you. Today all of our efforts are on war materials.

But later, let's talk to each other about how we might be of assistance to your company. We make it our business to find new ways to produce better things for less money.

BOHN ALUMINUM AND BRASS CORPORATION
GENERAL OFFICES—LAFAYETTE BUILDING • DETROIT, MICHIGAN

Designers and Fabricators

ALUMINUM • MAGNESIUM • BRASS • AIRCRAFT-TYPE BEARINGS

Know the Name

BOHN



Business Challenges the Future

By ERIC A. JOHNSTON

THE U. S. CHAMBER'S War Council in New York was a significant milestone.

It is fair to say that its discussions and conclusions represented the thought and aspirations of 1,000,000 business men who represent the Chamber's underlying membership.

It marked the close of the first full year of business mobilization for total war—a year of production achievements which even the most optimistic, in the bleak weeks following war's outbreak, regarded as improbable if not impossible.

Business of every character learned in that year to gear itself to a war economy, to overcome handicaps, restrictions and difficulties of a thousand varieties, and come through, somehow.

But I venture to say that the most far-reaching single development was one which on the surface may appear intangible. I refer to the steps taken to bring government, business, labor and agriculture together in a single team with the objective of winning the war in the shortest possible time.

These were but first steps. In many respects they have been halting and uncertain. A long, hard road lies ahead. But a start has been made toward the all-important goal of national unity, in deed as well as in word.

The earlier we reach that goal, the earlier will the war be won. And, equally important, the earlier will we prepare the way for winning the peace.

Democracy almost always gets off to a slow start. Competing interests, and the checks and balances which build a strong, free economy in peacetime, operate against rapid transi-



MR. JOHNSTON, beginning his second term as President of the Chamber of Commerce of the United States, reviews accomplishments of the past and expresses his confidence in our ability to meet the problems and tests of the year ahead

tion to a full war footing and psychology. But, once the start is made, once conflicting interests are brought together voluntarily to work in unison toward a single goal, democracy moves forward with a speed and a will which no totalitarian people can hope to match.

Business men, labor leaders, farm leaders and government officials have

gathered around the council table to work together for the common good. We have explored great fields of mutual interest. We all know more about the special problems of each of us and, above all, we are beginning to understand that no single group can stand alone, either for the winning of the war or the winning of the peace.

Builds good will

THIS dawning spirit of teamwork has brought from the public a new respect for, and confidence in, business men and the American system of competitive capitalism. By its deeds in factory and commercial institutions, business has aroused new recognition of its indispensable role in our economy. By its eagerness to cooperate with other groups, its readiness to forget self-interest for the national good, it has won its way back to a high place in public esteem.

You see this manifested in the public prints, in the action of state legislatures, in Congress, and in the attitude of some who, not so long ago, were decrying not only business men as individuals but the whole structure of our capitalistic system.

In this, it has been the duty and the privilege of the Chamber of Commerce of the United States to play an important part.

In the year ahead, we propose to continue our efforts along this line, to do everything within our power to bring about national unity and teamwork. At the same time, we propose to do everything we can to strengthen business, and prepare it for the great tests which lie ahead.

The machinery of the U. S. Cham-

ber has been streamlined. It has become increasingly a service organization, as well as a policy institution. Our purpose and obligation is to adopt constructive policies on national affairs, and translate those policies into action—always with the thought that what is beneficial to business as a whole is beneficial to labor, agriculture and the nation as a whole.

The areas in which there is need for aggressive business leadership are many. They cover such basic questions as government competition with business, subsidies and inflation controls, termination of war contracts, disposition of surplus war materials and properties, trade controls, manpower, civilian supply, price controls, contract renegotiation, social security, tax policy, and a host of others.

Tax laws out of date

OF FIRST importance is the tax structure because, as Senator George pointed out to the Annual Meeting, dependable post-war planning in the business field begins and all but ends within the four corners of our federal revenue laws.

Those laws should be revised in many respects, but, above all, to provide encouragement for risk capital and to assure adequate reserves for industry for post-war purposes.

Our tax laws have been built on the theory that we have attained a "mature economy," that America's frontiers and the spirit of adventure are gone. Yet, risk capital is the very life blood of free enterprise capitalism. Without it, our economy becomes the stagnant, inert thing that the long-haired economists have been telling us it is. When the willingness to employ capital adventurously goes, there goes free enterprise as well. Because the alternative to risk-taking by individuals is government investment, which leads, in turn, to state socialism.

Risk capital is the propellant that keeps the job-ball rolling so that it grows bigger and bigger. It finances new enterprises, new industries. One-fourth of all the employment in this country prior to World War II was supplied by 18 new industries developed by risk capital in the previous 50 years. Those 18 new industries were the product of man's genius in a free economy. Who is the pessimist who will say that American genius is dead, that we have neither the capacity nor ability to develop still greater industries in the years ahead?

It is also important that going concerns be adequately financed. They must not only maintain and expand established markets, but must be enabled to venture into new fields. Much

new enterprise comes, in modern times, as an offspring of the expansive corporation.

Charles F. Kettering of General Motors calls the time required to launch a new product the "shirt-losing period." If many new products are to provide the high level of national income which is essential to post-war transition, industry must be equipped with plenty of shirts to lose.

The Chamber of Commerce of the United States is working diligently on the whole vital problem of business taxation. It has developed a program which it is pressing home with vigor and confidence, for here is a program for everybody—farmer, worker, investor and manager alike. We are confident the American people will support a tax structure which will enable competitive capitalism to stand on its own legs.

We have met the acid test of war in the year just past, both at home and on the fighting fronts. We can be proud of our progress, but other grim, hard months lie ahead.

Much confusion and waste is inevitable in putting in motion a gigantic

war machine. We have had our full share of both the confusion and the waste. But now we have reached the point where the initial organization should be completed. The responsibility for this organization rests with government. And I regret to say that government in its organization of the home front is not fully meeting its obligations to the people at home and the troops in the field.

Our problems are complicated by continued lack of clear-cut authority, by absence of positive government policy, by petty disputes among administrators in official Washington. The effect is to keep the public in constant confusion and destroy confidence in Washington's direction of the war effort. It bewilders all Americans and is costly in the supply and direction of the armed forces.

It is the duty of business leadership, through constructive suggestion, to call attention to wasteful government practices and insist that they be eliminated. This we propose to do—to the end that the year ahead may bring not only united action, but the greatest possible strengthening of the home front and our forces in the field.

The Role of Business

By RALPH BRADFORD

General Manager, Chamber of Commerce of the United States

WHAT is it that America wants? What, by the same token, is the job of the Chamber of Commerce of the United States? It seems to me that we have just three proper ambitions—or rather a three-fold ambition all in one: to win the war; to keep the enterprise system of competitive capitalism; and to preserve representative democracy as our system of government. And that is but another way of saying that we want freedom.

We can have that freedom—provided we are content to trust our own genius and cling to certain simple but basic formulas: namely, that government is the creature and not the master; that competitive capitalism is our best economic safeguard; that individual initiative is the only way to full freedom; that social gains are meaningless unless they are grounded in an economy that will endure to support them; and that human freedom—freedom to grow, to achieve, even to fail—is the highest aim of a cultural society.

How can we translate that in terms of action? For one thing, it gets down to such grubby business as laboriously revamping our community concepts

—of deciding now whether our cities shall grow naturally by the expenditure of local effort and through the proper development of local resources and opportunities, or whether we shall continue in the future as we have in the recent past to predicate much of our city development upon federal largess.

Nationally it means that we of the Chamber of Commerce must do our own variety of post-war planning—which means first of all the willingness to think in new channels, to challenge ourselves with bold questions and courageous answers.

How can we get enough fat on the bones of industry to meet the problems of demobilization and reconstruction in the testing times ahead? What are the factors that will really provide full production, full distribution and full employment?

All this, the fateful and challenging unknown, is the natural, the inevitable field of business organization.

The National Chamber will continue to serve as the expression of a principle, the reflection of a national state of mind, the defender of an accepted way of life.



I.V.E.L. CORPORATION

A war story of 1,800 chambers of commerce and trade associations as reflected through their membership in the Chamber of Commerce of the United States

United for Victory!

By **RALPH HENDERSHOT**
Financial Editor, New York World-Telegram

AN EXPERIENCED newspaper man gives his impressions of the Chamber's annual meeting and discusses its significance

NO ONE attending the thirty-first annual convention of the United States Chamber of Commerce could fail to have been impressed. I was impressed by many things; the keen interest of those in attendance, for instance; the proud carriage of the business representatives, the straight thinking and straight talking of the speakers.

The high spot of the convention, I thought, was the luncheon on Tuesday, when labor, agriculture and industry pledged all-out cooperation in the future, not only for the duration but in the post-war period as well.

We noticed a few sitting around the luncheon tables who appeared to question whether this new treaty was the real thing. They seemed to think it might be merely honeyed phrases uttered for public consumption. Time, in my opinion, will convince these doubting Thomases that they were wrong. We make bold to speak with such conviction only because we be-

lieve the most binding of all contracts are those which benefit all parties concerned.

Certainly it is to the advantage of industry, labor, agriculture and, we might add, everyone else, to perpetuate the American way of life. My understanding with the editors of *NATION'S BUSINESS* was that this piece was to represent my own reactions to the convention, whether favorable or unfavorable. I make this clear because I am about to toss a bouquet or two.

Leader for all

THE BIGGEST floral offering, and a big one, indeed, must go to Eric A. Johnston, president of the Chamber. He has been termed the best leader industry has had in many years, but I submit his leadership has not been confined to industry. He has pointed the way to all Americans.

Until recently it seemed that we might be about to accept some foreign "ism" in this country. Some of our people in high places, in fact, were making statements and laying plans. Democracy, as we have always known it, had precious few supporters. Most of those who obviously favored it seemed afraid to stand up and say so.

Mr. Johnston has been an outstanding exception to the rule. Months ago he startled the country by telling the public in no uncertain terms that he was for capitalism and proposed to fight for it. I suspect that even he himself was surprised at the favorable

response. He found a large part of our people agreed with him, and that they needed only a competent leader around whom to rally.

This convention has proved an excellent vehicle with which to further the interests of democracy and the capitalistic system. And, by inviting representatives of labor and agriculture to the meeting, Mr. Johnston pulled a master stroke. These leaders concurred with his views on the capitalistic system; and if industry, labor and agriculture desire to retain capitalism, those trying to promote foreign "isms" are not likely to get far.

Upon investigation I learned that Mr. Johnston has been doing a great deal of hoeing in the Washington vineyards in recent months. This hoeing has been not alone in the vicinity of Capitol Hill. The labor diggings have been well cultivated. Agriculture has not been passed up either. He moved in on all these quarters and convinced the people he met that he was sincere in his desire to do a job for all.

Unity was real

THAT STATEMENT by Robert J. Watt, international representative of the American Federation of Labor, that he was like Daniel in the lions' den was just for a laugh. And it was good, too. But no labor leader is sticking his neck out these days. He has too much at stake. These invitations were accepted and the speeches of cooperation were made only after the speakers had convinced themselves that industry was sincerely desirous of correcting its past mistakes under intelligent and forceful leadership.

[The editors of NATION'S BUSINESS warned me in advance that they were up against a paper shortage, and that I should write accordingly, and here I have taken up a large part of my allotted space in telling about Mr. Johnston and his efforts for unity.]

But, even with the full knowledge that I shall be obliged consequently to ignore a number of excellent speeches, I have no apologies. I, too, like our capitalistic system. I, likewise, pledge cooperation. But there is at least one speech I shall not ignore.

Joseph B. Eastman, head of the Office of Defense Transportation, made a notable contribution to the meeting. We all know how important transportation is in time of war. Most of us have had that fact brought home to us almost every day in recent months, and it becomes rather irksome at times when we have to stand or can't make connections. But of course, we

wouldn't think of holding that against Mr. Eastman.

Well, Mr. Eastman made one of the best cases for private enterprise that we have heard. He told how the railroads in 1942 carried 42 per cent more freight and 14.6 per cent more passengers than in their previous peak years, which were 1929 and 1920 respectively. They did it without a breakdown and despite their inability to get but precious little new equipment.

Most of us remember what happened in the last war under government operation of the railroads. They not only proved unequal to the task of handling the freight and passenger business, but equipment and road-bed were in such bad condition when the roads were turned back to private ownership that it took years to put them back in good running order.

Tough days lie ahead, however, according to Mr. Eastman, and he called upon industry to cooperate to the fullest in "making ends meet." He was particularly concerned over passenger traffic.

"We have ample reason to fear that the cure (by rationing of travel) would be worse than the disease," Mr. Eastman said, urging "voluntary renunciation of unnecessary travel on the part of the public, and the adjustment of its travel habits to war necessities" as an alternative.

Straight from the shoulder

ONE reason why a newspaper man is likely to go overboard for Mr. Johnston is the fact that, when he has anything to say, he says it right straight from the shoulder.

Winthrop W. Aldrich, chairman of the Chase National Bank of New York, had something important to say about the American and British plans for stabilization of international currencies, although it was sometimes necessary to read between the lines to realize how important it was.

What he may have felt like saying was that those whippersnappers in Washington who doped out the American plan are novices when it comes to international commerce and currency stabilization. I'll bet he would have taken that fellow Lord Keynes over the coals for whipping up a plan which, if adopted, would put Britain back in the saddle in international trade and banking when the war is over, and keep our gold buried for a long, long time.

Mr. Aldrich is a banker of the old school. He has had to make a living with such things as financing trade and handling foreign exchange. It was plain that he didn't like either plan and he made some darn good

points in telling why, even if he did come near hiding them by bending over backward to be nice about it.

The voters know

WE HAVEN'T overlooked the splendid speeches by various federal officials. These received such excellent coverage in the newspapers, however, that there is little point in repetition. In fact, Mr. Johnston's opening speech received much less attention than it deserved, due to the spot news value of what Gen. Brehon B. Somervell had to say.

Summarizing some of his replies to criticisms, General Somervell said:

We are not neglecting the South Pacific. We are not neglecting the submarine. We are not neglecting the civilian economy. We are not neglecting the rights of labor. We are not neglecting industry's rights. We are giving each of these, we think, consideration in its proper proportion and at the proper time.

But the one thing above all else we do not neglect is the business of winning the war. We will allow nothing to distract us from that purpose.

All the drugstore admirals and the powder room generals can't sway us from the determination to win the war as quickly as possible, as cheaply as possible in American lives, and to do the job thoroughly.

These federal officials and military authorities all paid fine compliments to industry for the war job it is doing. And I'm sure it was not merely because they didn't have to use their ration points to get some mighty good eating. What else could they say? Industry has done a bang-up job, and the voters all know about it.

That is why, as we said earlier, the representatives of industry attending the convention had their chests out a bit further than we have seen them in years. They were not strutting, but their heads were held higher and they didn't look behind them so often as heretofore.

That old saw about the East and West never meeting was borne out at one of the sessions at which "The Place of Business" was under discussion: A representative from California was cooking on all burners, and the pudding he turned out was not quite to the liking of those who dismiss the high national debt with a shrug by saying, "What's the difference? We owe it to ourselves."

At any rate, one of the women delegates got up and denounced him from the floor as not being very "constructive."

We don't say he was in error

or that he should not have said what he did. We do think, however, the newspapers did well in ignoring it for the most part. It wouldn't have helped these War Bond drives too much.

While other military men were picturing what our armed forces are doing to defeat the Axis powers, an Army Air Force officer, Col. William S. Bentley, told the meeting that Germany could bring the war to American shores through the use of long range aircraft. He said:

Airplanes and yet more airplanes, the chief means by which we are striking at Germany's industrial effort, except for blockade, are today the sole means by which we are wrecking the German and Japanese will to fight. It is the means by which we are carrying the war home to the Germans and will carry it home to the Japanese.

Perhaps the main reason Goering's planes have not raided us is that German psychologists realize that the Axis gain in morale and publicity following such an attack would be over-shadowed by the immediate fusing in America of such democratic difficulties into an "all out" war effort by All Americans on the home front and factory front.

It is technically possible for the Germans today to raid both Washington and New York if they wish to pay the price. They are reputed to have carriers; they have plane carrying cruisers; they have long range bombers. The Atlantic Ocean is a vast expanse. The Battleship *Bismarck*, with its escorting destroyers, was not discovered until it was miles out in the Atlantic. They may send a small force any day toward America, and I personally predict that they will for propaganda effects. The raid will be small—possibly three airplanes against Washington and three airplanes simultaneously against New York. The crews will probably force-land and surrender after dropping their bombs. The material damage, if any, will be insignificant. Some, if not all, of the planes may be intercepted by our defending air units and shot down.

The important thing for us is not to be surprised—be prepared for it, for it may happen any day.

To convince politicians

IT SEEMS to me the leaders of agriculture missed an excellent opportunity to place their problems before the general public at the convention. All those familiar with farm operations concede that they have serious problems, and yet, when these leaders had one of the best forums imaginable, they stuck to the old, familiar generalities.

Those who arranged the program for the convention were well aware of the part agriculture plays in the winning of wars. Undoubtedly that was one of the

prime reasons why they allotted so much time to that division of our economy. Seemingly, however, those who were invited to speak have not yet learned the vital lesson industry has been learning over the years that to convince the politicians it is necessary first to convince the voter.

We would contrast their speeches with that of Kinsey M. Robinson, president of the Washington Water Power Co., for instance. Mr. Robinson took occasion to tell Chamber members, and the public as well, that predictions of a coming power shortage are just so much eye-wash.

The predictions, he said, can only be the product of "gross bureaucratic incompetence" or a desire to "socialize completely the business-engaged utility industry."

Try as they might, he added, "the public power politicians have been unable to make a case which would enable them to take over the industry." He held that the industry was ready when Hitler overran France and was "more than ready" at the time of Pearl Harbor.

Let's be frank

FROM what we could gather, most American business leaders are opposed to a policy of isolationism for this country. Of course, the term "isolationism" is loosely used and it probably would be a mistake for anyone to jump to conclusions as to just how far the user of the term would have us go.

But, one business executive, at least, A. E. Mallon, vice president and treasurer of the Pillsbury Flour Mills Co., would have us go virtually the full route. This excerpt from his address will indicate what I mean:

After the last war too many people were deceived by democratic promises. This time we must make only those promises we intend to keep, and we must keep those we make. We must state our intentions while we and our allies are dependent upon one another to win the war. We must act while differences can be compromised into the most satisfactory plan that all can agree upon.

The world is looking to the United States for the leadership which only we can give in the war, in the peace, and in the formation of the United Nations group. This is at once our great opportunity and world obligation. Our legislative and executive should agree now on the skeleton framework for such a program, leaving the details for completion by post-war artisans. In collaboration with Britain, Russia, and China, we should announce a new world freedom, a new opportunity, a better world standard of living—which the four great

allies will underwrite. The United Nations will thereby give hope and encouragement to oppressed peoples everywhere and make them eager to help in any way they can to throw off the Axis yoke.

To maintain the rules agreed upon, an international force must be established. It must be made clear that the purpose of such a force is not to impose outside decisions on any nation, except as that nation's conduct is endangering the security of other countries.

The United States has constantly avoided entangling foreign alliances only to be drawn into war twice in a quarter of a century. This is because we refused to do collectively what we are perfectly ready to do, have had to do, and will continue to have to do, individually.

A year or so ago a pat on the back from President Roosevelt would have made industry turn somersaults. It means less today, although it is still welcome.

It is welcome primarily because it means that the man who leaves the pressure of work at home long enough to go to Washington and back is likely to sleep a little better on his return. And, he may even be able to smile a bit.

It works out something like this: When the Big Chief frowns and waves the stick at someone, all the little chiefs frown and wave sticks at the same person or group. But, when the Big Chief smiles, all the little chiefs smile. Well, the Big Chief has smiled, so don't be surprised if you are met at the station with a brass band the next time you have occasion to go to Washington. Well, maybe not a brass band. Maybe you will just be obliged to take less pushing around. The Big Chief didn't say "positively."

Greetings from Churchill

IT WAS NICE, too, of Prime Minister Churchill of Great Britain to send his greetings to American management and labor through Mr. Johnston and Lord Halifax. The Prime Minister said in part:

We asked for tools. You gave them to us. Without the constant flow from your factories to supplement our output, Allied armies could not have gained the remarkable victories of the last six months. Without ships that you have built and are building on a prodigious scale, the life-lines of civilization across the oceans of the world would have been worn thin if indeed they had not snapped.

We suspect that Halifax or the censors doctored that statement up a bit. The Prime Minister is a pretty forthright fellow, from all accounts, and the above sounds as though he

was being careful not to say anything that could be repeated later on in the silly arguments, which are certain to come up over who won the war.

Like a circus

COVERING a meeting like this one is like trying to watch all that is going on at a three-ring circus, only more difficult. It is impossible to attend all of the various meetings.

For instance, on Wednesday there were five separate and important luncheons. We selected the one on government finance because we figured it would attract much more attention than in former years. Our guess proved accurate. It was necessary to set up several additional tables to accommodate those who wished to hear the speakers.

Fred R. Fairchild, professor of political economy at Yale University, was introduced by Ellsworth C. Alvord, who presided, as the leading economist in the United States. No one could give him an argument on that because the only way to determine whether or not an economist is good is to wait for several years and then check his predictions and recommendations against the results.

At any rate, Mr. Fairchild did an excellent job, it seemed to us, of living up to Mr. Alvord's opinion of him. Being most realistic, he cited some figures which were a bit frightening. But, he seemed to think we would be able to keep in the black after the war if we didn't try to play Santa Claus, feed the world or attempt to maintain world order.

Mr. Fairchild figured our expenses

would be about \$15,000,000,000 a year. This would provide \$4,000,000,000 for interest on debt, \$2,000,000,000 for reduction of debt, \$4,000,000,000 for military requirements and the remainder for other expenses. Under the circumstances, he thought we would be obliged to forego some of the provisions of the Atlantic Charter.

More than 35 resolutions were adopted to represent the views of business leaders on as many subjects.

Apparently irked at the encroachment of government in business affairs through constantly growing regulatory powers, the Chamber went on record with a request that any new legislation along that line should be limited strictly to interstate commerce. It was stated that the expansion of ideas as to what constitutes or affects interstate commerce, and thus comes within federal power, has become a menace to the freedom of the people.

Another resolution proposed that Congress create a joint committee to examine the rights of employees, employers and the public under the operation of the Labor Relations Act, the Wage-Hours Act and the Railroad Labor Act. The Chamber also would have Congress prohibit political contributions by labor organizations and require them to publish financial statements.

Business leaders have sought for a long time to get a better balance between labor's rights and responsibilities, and recent developments in the coal mining industry indicate how right they have been.

Another important subject covered by resolution was federal taxation. The Government was urged not to raise additional revenues through income taxes, but rather to seek them from other sources, including a sales tax.

Immediate preparations were strongly recommended for equitable termination of war contracts and toward the disposition of surplus war properties through a

new liquidation agency.

Of course, what business leaders fear is that those who have been pressing for government ownership of industry will attempt to further their aims by having the Government operate the plants it has acquired in the emergency war period. If that were to happen, it would not be long before private plants would have to quit through inability to compete. That danger would seem to be very real, in the opinion of Sen. Walter F. George, of Georgia.

On the spot

HE told the final session:

"That the private enterprise system has sometimes failed or else has proven itself to be inadequate cannot be denied in view of our experience of one short decade past. That system is definitely on the spot again, or will be when the war ends. If fairly constant employment cannot be provided, the American people will turn to the Government, even though the mistakes, inadequacies or policies of government are, ironically, responsible for the failure.

"It is this turn that must be forestalled. By and large, the American people do not wish to see their government turned general employer. In this thought we are united. Again, we believe the vast majority of the American people are willing to rely upon our free enterprise system as the surest means of preserving essential human values and freedoms with which we are blessed. If we are to succeed, public policies must be adopted and followed which will make possible not only the operation of the free enterprise system, but its expansion."

NEW CHAMBER DIRECTORS



R. L. Carr



F. P. Champ



P. C. Groner



E. O. Shreve



L. W. Trester

BALLOTING at the annual meeting, the delegates elected five new directors to assist in carrying out Chamber policies: Ralph L. Carr, attorney, Denver; Frederick P. Champ, President, Cache Valley Banking Co., and Utah Mortgage Loan Corporation, Logan, Utah; Powell C.

Groner, President, Kansas City Public Service Co., Kansas City, Mo.; Earle O. Shreve, Vice President, General Electric Co., Schenectady; Leonard W. Trester, Assistant to the President, General Outdoor Advertising Co., Inc., Omaha.

Post-War Sword of Damocles

How to Dispose of Surplus Supplies Is No. 2 Peace-Time Problem

By A. H. SYPHER

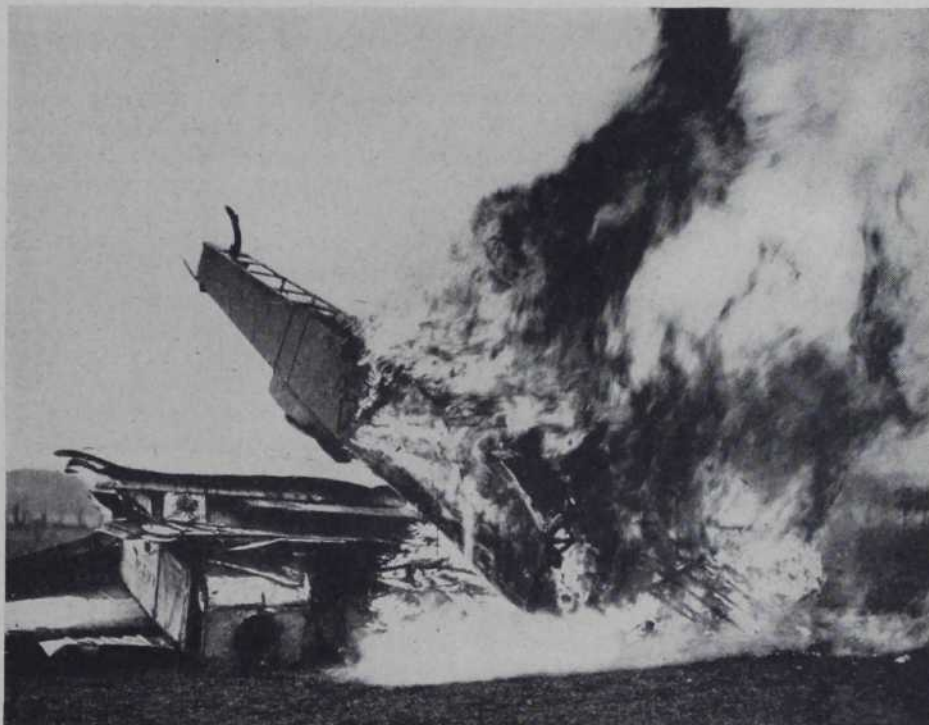
HUGE STOCKS may destroy some industries, change our whole economy after the war

AN EXPERT accountant who has spent the past year studying war surplus problems from a vantage point within the Government has reached this conclusion:

"No one has any real knowledge on the subject. There's no way to estimate how great our post-war surpluses will be. The figures involved are so darned big that anything you name is just another big figure.

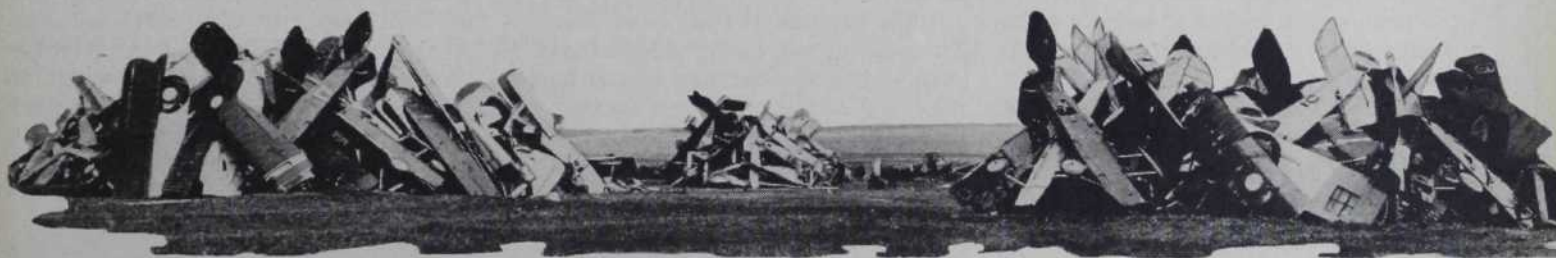
"We'll probably have \$25,000,000,000 worth of equipment, supplies and materials on hand at the end of the war. That's a guess, not an estimate. And if I were betting on it, I'd bet it would be higher than that.

"It's going to be big enough that, if



BROWN BROS

America will end the war with more than 100,000 surplus airplanes. Will they be stacked and burned as were some after World War I?



it isn't intelligently handled, it will have a terrific impact on our economy."

The handling of that stock pile is America's Post-war Problem No. 2.

Distribution of surplus government-owned goods at the close of World War I changed some of the habits of the nation. Surplus at the close of World War II will be at least five times greater. It could change more than habits. It could upset an entire national economy intricately balanced for the changeover from war to peace.

"When the war is over we will have enough shoes on hand, if dumped on the market, to destroy the shoe industry," Congressman Carter Manasco of Alabama has said. "The same is

true of airplane motors, airplane parts and many other items."

The other items range from shirts to ships, and cut straight across a major part of American production.

The surplus in airplanes is expected to exceed 100,000—more than a year's work for the millions of men and women now employed building them.

There will be trucks by the tens of thousands—perhaps flowing into a market that otherwise might be providing employment for returning soldiers by the tens of thousands.

There will be jeeps and medical supplies, fabrics and plumbing supplies, foodstuffs and raw materials, hardware and shells—and 150,000 other items being bought in tremendous

quantities to make sure that American soldiers have what they need to win the war.

The first step in disposing of surplus will be to determine what is surplus. This determination cannot be reached until the size of the post-war army is decided. Then it must be based on an inventory, and taking that is an almost impossible job.

The goods will be scattered throughout the nation and the world, in charge of a score or more agencies.

The Army, Navy and Maritime Commission bought World War I supplies. Now in addition to this Big Three are the stockpiling agencies, Rubber Reserve, Metals Reserve, Defense Supplies, the Treasury's Pro-

curement Division and others. Even the various old-line agencies, such as the Department of Interior, have intermixed war work with their traditional duties.

If the surplus goods and materials are sold anywhere in the world they will displace the employment of workers who otherwise might be kept busy making new products.

Sell, say taxpayers

IF they are held off the market the uncertainty of government policy and the fact that government has such quantities of materials and goods will tend to depress the lines that would replace the stockpiles through normal channels.

Many forces will bear on the disposition policy.

Taxpayers will want surpluses sold in the most efficient manner and at the highest possible prices and the income applied to the national debt.

Consumers will be bargain hunting.

Organized labor probably will oppose any policy that appears to it to threaten employment or re-employment but the fact that working people also are consumers will affect its attitude.

Without doubt farmers will line up against the distribution of millions of cans of food which would compete with then current crops.

Processors and industrialists will be concerned over huge inventories of the products their plants are equipped to turn out.

The distribution system will face the problem of handling war stocks or competing with them. In the last war it did both to some extent.

On November 12, 1918, thousands of telegrams radiating from Washington ordered production on war work

stopped. Some contracts were completed afterward, usually to finish nearly completed products.

The sudden termination of the war left the Government with more than \$5,000,000,000 worth of goods and materials on hand in warehouses, in factories, in transit on roads, trains and seas, in foreign receiving depots and on battlefields.

At the time it was the largest quantity of supplies ever accumulated in history.

The Government owned 100,000,000 pounds of copper, enough wool to meet two years of normal demand, 860,000 tons of nitrates, more than 4,000 dental chairs, nearly 9,000,000 brushes, so many blankets that it offered them for sale in 1,000,000 lots, canned foods valued at \$120,000,000 and almost countless other items.

These supplies were sold for as little as one half of one per cent of the cost, and for as much as 116 per cent. The average was 36 per cent.

A floor price of \$30 a ton was placed on ships that had cost up to \$150 a ton to build, and they rusted at the wharves where they were berthed. The Navy sold hundreds for scrap years after the war, while American freight was being carried under foreign flags.

In some instances airplanes and other serviceable equipment were stacked and burned. In others scandals arose over the deterioration of trucks, automobiles and supplies left for months in open fields.

In most cases surpluses were disposed of by the agencies that held them.

Rail equipment was sold readily. The wear of war had created a market, just as heavy wear and heavy bombings are creating a vast market for rail equipment today.

Raw materials moved quickly, and

brought the highest average return, because most of these were adaptable to peace-time demands. Chemicals and acids brought 75 per cent of their cost, wool 78 per cent, leather 73 per cent.

Greatest losses were taken on munitions which had no peace-time uses. Artillery and ammunition returned four per cent of cost, airplanes ten per cent. Small arms found a broader market and returned 60 per cent.

Some goods that had no ready adaptation to peace-time use, instead adapted peace-time customs to their own purposes.

The marketing of tents, canteens, blankets, picks, ropes, canned foods, collapsible cots, ponchos, and rifles brought a change in American habit. It took Americans outdoors by the millions. It is estimated that 10,000,000 persons went auto camping in 1921. That popularity may be traced directly to the sale of war-time equipment surplus.

Cowboys wore Army hats

C. H. LIPPSETT, who served as adviser to the War and Navy Departments on disposition problems, has described other effects:

"It seemed that nearly everyone bought Army and Navy goods of some kind. It was nothing to see wealthy campers in the Maine forests with a 'U.S.A.' blanket strapped over their shoulders.

"The cowboy in Wyoming wore an Army hat; the farmer in Texas was attired in Army or Navy shoes; the oil well driller in California wore an Army shirt, the miner in Pennsylvania Army trousers; the woodsman in Michigan used a Navy overcoat; the truck driver in New York had Army

(Continued on page 73)



Surplus ships rusted at the wharves where they were berthed after World War I. Hundreds were later sold as scrap, while American freight was being carried under foreign flags

The "power" behind our War effort — *and* *how life insurance helped produce it!*

FROM THOUSANDS of busy factories all over America, the sinews of war are flowing toward the battle fronts in a mighty, ever-growing stream.

The "power" behind these factories—the energy that permitted this country to become, almost overnight, one vast arsenal—is electricity.

For no other nation in the whole wide world enjoys so widely the industrial benefits of electricity. Moreover, in more than 80% of all dwelling houses, on more than 40% of all farms a flip of a switch brings conveniences undreamed of fifty years ago.

How did the vast electric power system that makes this possible come about? Through American initiative and enterprise.

Our electric power system took years of development. It took faith and courage and vision on the part of management. And it took billions of dollars, invested in the complicated equipment needed constantly to improve service and at the same time reduce the cost of electricity to the consumer.

A substantial share of this money came from life insurance companies. For example, Metropolitan has invested many millions in underlying securities of public utilities, helping to finance their growth and expansion.

These are the dollars which came to the Company because life insurance agents helped policyholders to provide security based upon the needs of their particular families.

Today, by far the larger part of Metropolitan's fund available for investment is going into United States Government bonds. But when the war has been won, America's power companies will continue to progress and electricity will work many new wonders in its field. Already we are promised many new developments in radio, television, and electronics.

When, in the post-war period, money is once again needed to bring the magic of electricity to more millions of people, policyholders' dollars will be ready. For Metropolitan's 30,000,000 policyholders have faith in the continued and growing greatness of their country... a faith they evidence every time they pay their premiums.

BUY WAR SAVINGS STAMPS — FROM ANY METROPOLITAN AGENT, OR AT ANY METROPOLITAN OFFICE

M*etropolitan Life Insurance Company*
(A MUTUAL COMPANY)

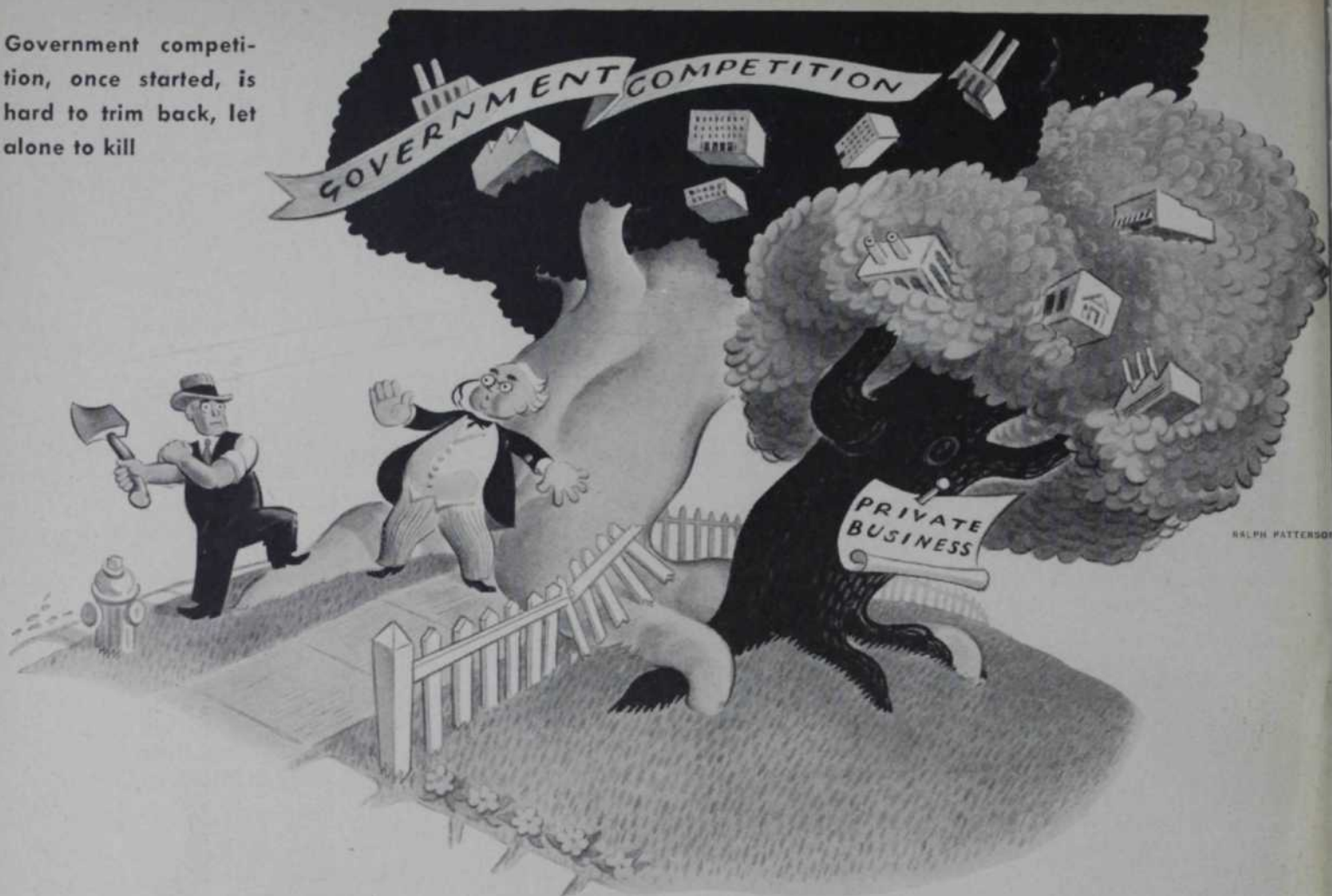
Frederick H. Ecker, CHAIRMAN OF THE BOARD

Leroy A. Lincoln, PRESIDENT

1 MADISON AVENUE, NEW YORK, N. Y.



Government competition, once started, is hard to trim back, let alone to kill



Bureaus Have Nine Lives

By HERBERT BRATTER

FOR a decade, America has been drifting toward a national economy completely dominated by Washington.

The war has inevitably accelerated that drift.

Tremendously powerful government agencies now engage in large-scale international and domestic business operations—purchasing, production and distribution—as emergency activities.

Will those agencies go out of business within a reasonable time after the war? Or will they find new “emergency” activities to keep them busy in the future?

Congress recently has been reasserting itself by checking the Executive branch in various ways. For instance, there has been the matter of the \$25,000 salary limit. Then there has been the refusal to extend the President's devaluation power, and the disciplining of the Office of Price Administration.

CONGRESS is trying to get rid of certain agencies whose work is done. How well it succeeds is likely to determine whether or not free enterprise will survive

Directly at issue is the form of survival of our free enterprise system.

But Congress has found from experience that it is easier to grant power than to rescind it.

Take the case of the Home Owners' Loan Corporation.

This agency was set up in 1933 to extend emergency refinancing to distressed home owners. It has made no new loans for about seven years. Today it rents and sells properties in its possession.

The case for winding up HOLC is expressed in a bill (H. R. 1283) introduced in January by Congressman Everett M. Dirksen of Illinois:

Home Owners' Loan Corporation was created by the Congress to provide a

necessary fiscal agency of the United States to assist in an emergency and to serve the general welfare. It has accomplished its principal objective and is now liquidating, administering and collecting home-mortgage loans, home-purchase contracts, real estate, and other assets which, consistent with the policy of the United States, may be transferred and administered by local private persons and business corporations.

Such course will rapidly reduce the obligations of the United States, reduce by several thousands the number of employees of the Government, and reduce non-war expenditures, thereby strengthening the credit of the Government, reducing its expenses and contributing to its ability to carry on war. Specifically, such course will contribute to the present manpower problem.



HOW DOES YOUR GARDEN GROW?

■ When you look at America's Victory Gardens, score another point for the selling power of advertising! For advertising's unique contribution to our war effort is its ability to sell *big ideas* in terms people understand—to translate the big need for increasing our national food supply into the simple idea of spading up the spot by the garage.

Since the Victory Garden idea was first proposed, patriotic-minded advertisers have devoted thousands of dollars worth of space to its promotion. The return on their money can be seen today in back yards, vacant lots—and even lawns and public parks—all over America.

But the promotion of Victory Gardens is

only one of the many ways in which advertising's highly-specialized techniques are helping to win the war.

Advertising in newspapers and magazines is selling billions of dollars worth of War Bonds and Stamps. It is showing civilians how to conserve precious materials, how to salvage waste, how actually to *raise* their nutrition standard on rationed food. It is performing these and hundreds of other wartime tasks—all with the same vigor and effectiveness which marked its drive for markets in the days of peace.

At Kimberly-Clark Corporation we are proud that much of the greatest advertising in America is printed on our papers.

KIMBERLY-CLARK CORPORATION

ESTABLISHED 1872 • NEENAH, WISCONSIN

NEW YORK: 122 E. 42ND ST. • CHICAGO: 8 S. MICHIGAN AVE. • LOS ANGELES: 510 W. 6TH ST.

Levelcoat^{*}
PRINTING PAPERS

Trufect^{*}
For Highest-Quality Printing

Kimfect^{*}
Companion to Trufect at
lower cost

Multifect^{*}
For volume printing at
a price



^{*}TRADE MARK

HOLC has long since fulfilled the purpose for which it was set up.

But the Government nevertheless does *not* want to do away with HOLC. The objection to doing so, as voiced by the Federal Home Loan Bank Administration, is that forced liquidation of HOLC within one year would cost the Government at least \$440,000,000 and would precipitate thousands of unnecessary foreclosures.

Hard to liquidate

THAT the Government has never yielded to efforts to "rush HOLC into liquidation" is explained as due to the absence of any sound plans for doing so while protecting home owners, the Government, the real estate market and the country's mortgage banking structure.

After rescuing financial institutions in 1933, HOLC now sees "some of these same institutions clamoring loudly for a handout from the resources the HOLC recovered . . . These interests seek only the best HOLC loans . . ."

It was easier to launch HOLC than to liquidate it. It is easier to put the Government into competition with private enterprise than to get it out.

A government bureau is always reluctant to relinquish its hold, even when its work is finished. It finds new "reasons" to prove that its continued existence is indispensable to the solution of whatever problems the country may be facing.

Consider, for instance, the Regional Agricultural Credit Corporation *system*, one of the score of federal farm credit agencies.

RACC was established in 1932 to extend *emergency* short-term credit to farmers. In 1933, its activities were curtailed. There was no need for RACC. Its function was being filled by the Production Credit Associations and the Resettlement Administration.

Between 1933 and 1937, regional agricultural credit corporations were inactive.

In 1937, the RACC of Washington, D.C., was created and into it were merged all but one of the regional corporations. That one was in Washington State and it made some loans in 1941. Otherwise, all the regional agricultural credit corporations were in liquidation from May, 1934, until January, 1943.

In January, 1943, Secretary of Agriculture Wickard announced that, to help increase farm production, be-

tween \$200,000,000 and \$225,000,000 would be made available, through RACC, for short-term lending to farmers.

However, since RACC has access to the Intermediate Credit Bank, the Reconstruction Finance Corporation and the Federal Reserve banks, it may lend much more than \$225,000,000—or it may lend less, out of respect for the strong criticism in Congress.

The Agriculture Department maintains that revival of RACC lending is justifiable as a war measure, assuring each producer "of an immediate and convenient source of credit for the fullest utilization of his farming facilities," and that it is not a substitute for other sources of credit.

"In nearly all communities there are some farmers who have financial difficulties or for some other reasons cannot obtain credit for food production from regular sources."

The Department feels that the Government should assume credit risks in connection with the production of war crops, just as it does in connection with munitions production. Secretary

of the Treasury Morgenthau endorses this position. He holds that, to bring about maximum food production, in many cases there will be credit risks "of a type . . . private lending agencies should not be expected to assume."

RACC crop loans are made against security of the specific crops to be grown, and RACC does not look to a borrower's other assets for repayment if the crop concerned fails to produce the funds to repay the loan. Bankers term this non-recourse, non-personal-liability element a very unsound principle.

Revival of RACC led to an investigation by the joint congressional Economy Committee and subsequent introduction of a bill (S. 914) signed by Senators Wherry (Neb.), Byrd (Va.), Nye (N.D.), McKeller (Tenn.), and George (Ga.), to liquidate the system. This bill requires the Governor of the Farm Credit Administration to report to Congress every 90 days on the progress toward liquidation.

In reporting the hearings which preceded introduction of the bill, the Economy Committee states: "As a practical matter, the conditions of commercial-type loans made to farmers by more than 11,000 country banks have been most liberal."

Duplicates 19 others

IT concluded that the RACC not only is "depriving private lending institutions and country banks of their normal loan business," thus threatening to weaken the structure of such institutions, but also "duplicates wholly, or partially, the lending activities of 19 other federal agricultural lending agencies—three of them in the Agriculture Department."

The economy committee offered the further opinion that the RACC program will "impede rather than increase the production of food," and recommended not only liquidation of the RACC, but simplification and consolidation of the Government's agricultural lending agencies, expansion of the FCA's emergency crop and feed loans and discontinuance of solicitation of borrowers by government agricultural lending agencies.

Bankers pointed out at



It isn't credit the farmer lacks but manpower and farm machinery



"Within the hour"—through **Kodak** and Wirephoto you SEE the news happen

A "hot news" photograph is wrapped around a cylinder, locked in a machine about the size of your cabinet radio. The flick of a switch, and the cylinder begins to turn.

The same switch starts similar cylinders, each with a wrapping of photographic film, in scores of other cities, where newspapers use the Wirephoto service.

In the sending machine, a ray of light illuminates a tiny path around the spinning cylinder. Over and over, 200 turns to an inch. Reflected from the picture, this light is converted into electrical impulses.

In each receiving machine, these impulses are changed back into light... focused through a powerful lens to a pinpoint path around the film. Thus exposed, the film

becomes a negative of the picture in the sending machine.

"EXTRA! EXTRA!"... If the event is big enough, and censorship permits, "within the hour" you see in your home paper a photograph snapped hundreds or thousands of miles away.

Associated Press Wirephoto, with Kodak's help, within a few short years has brought the electrical transmission of photographs from comparative crudity to its present near-perfection.

KODAK'S PART WAS...

to produce a photographic film with qualities unlike any other, which

would "process" in a fraction of the usual time... and a lens of sufficient power to focus faint gradations of light on a pinpoint of spinning film, with complete fidelity.

Portable sending machines, the size of a suitcase, have been perfected—can transmit a photograph or map over any telephone or radio transmitter.

WHAT DOES THIS MEAN IN FIGHTING A WAR? News pictures for us at home, of course. Plus a vital new "time" factor in strategy—the ability of those in our Command, with today's battle scenes and maps before their eyes, to direct now the next movements of troops and ships and planes... Eastman Kodak Company, Rochester, N. Y.

Serving human progress through Photography

Federal Financial Agencies

as listed by the American Bankers Association

GROUP I

Agriculture, 20 agencies:

Central Bank for Cooperatives
Commodity Credit Corporation
Disaster Loan Corporation
District Banks for Cooperatives
Electric Homes and Farm Authority
Emergency Crop and Feed Loan Section
Farm Credit Administration
Farm Security Administration
Federal Credit Unions
Federal Crop Insurance Corporation
Federal Farm Mortgage Corporation
Federal Intermediate Credit Banks
Federal Land Banks
Federal Land Bank Commissioner
Loans
National Farm Loan Association
Production Credit Associations
Production Credit Corporations
Puerto Rico Reconstruction Administration
Regional Agricultural Credit Corporation
Rural Electrification Administration

GROUP II

Housing and Construction, 9 agencies:

Federal Home Loan Bank System
Federal Housing Administration
Federal National Mortgage Association
Federal Public Housing Authority

Federal Savings and Loan Association
Federal Savings and Loan Insurance Corporation
Federal Works Agency
Home Owners Loan Corporation
R.F.C. Mortgage Company

GROUP III

Business and Banking, 16 agencies:

Defense Plant Corporation
Defense Supplies Corporation
Export-Import Bank of Washington
Federal Deposit Insurance Corporation
Federal Reserve Bank Loans to Industry
Metals Reserve Company
Navy Department
Reconstruction Finance Corporation
Regulation V War Loans
Rubber Reserve Corporation
Smaller War Plants Corporation
United States Commercial Company
United States Postal Savings System
War Damage Corporation
War Department
War Finance Corporation

GROUP IV

Transportation and Power, 4 agencies:

Inland Waterways Corporation
Tennessee Valley Authority
United States Maritime Commission
United States Railroad Administration

tion at the end of the bill which will, it believes, make it impossible for these corporations to continue their lending activities.

This committee found that the RACC is not limited to supplying credit where banks cannot or will not supply it. The criterion is the borrower's wishes. If, for any reason, he does not desire to patronize a bank, that is enough.

Congressman Malcolm Tarver of Georgia developed this fact with Governor Black.

"If a farmer refuses to patronize a bank just because he does not like the color of the cashier's hair that is a sufficient reason for your RACC going in and offering him a loan?" Mr. Tarver asked.

"If his refusal to get credit from that source results in less tons of food produced in times like this, I would certainly say it was sufficient reason," Dr. Black replied. He also stated somewhat impatiently that the county boards which recommend RACC loans "are not expected to run around the county and expend their time and effort to get a refusal from every money lender . . . and really to establish themselves as dead beats before they can get credit."

Attack on democracy

IT may be true that the RACC's revived activities do not, in terms of dollars, constitute serious competition with the banks. It may even be true that the RACC will take away no business from private enterprise. The point about RACC's revival that deserves emphasis is simply this:

It exemplifies a tendency in government to ignore private agencies and private enterprise. The fight of private banking against RACC is, in the opinion of A. L. M. Wiggins, vice president of the American Bankers Association, a front-line battle in the fight to preserve this nation against a socialistic state. According to Mr. Wiggins:

"It has been the history of the nations of Europe, Germany and Italy and others, that the dictator's first move is to get control of the nation's credit system. That is the spearhead of the attack of state socialism on democracy . . . We must recognize in this contest something more fundamental than the salvation of the chartered banking system, because the chartered banking system and private credit are the foundations on which our system of private enterprise rests. If you destroy the private enterprise system in this country you destroy our entire system of democracy and representative government."

the hearings, that there is no shortage of bank credit for farmers, but that the real bottleneck holding up the greater farm production, which the Department of Agriculture wants, is the lack of manpower and farm machinery.

Other facts about government-subsidized farm credit agencies were brought out in a House Appropriations Committee report. It said:

Governor Black of the Farm Credit Administration, in his testimony before

the Committee, admitted that there is no bottleneck in the established and ordinary sources of credit. (See p. 1293 of the hearings.) A searching interrogation failed to elicit from him any information indicating that any producer anywhere in the country will be unable, where credit is justified, to secure adequate loans from the private lending agencies available to him.

The committee believes there is no justification for the present revival of the Regional Agricultural Credit Corporations, and it has therefore inserted a limitation in the form of a new sec-

"I never thought the time would come..."

I never thought the time would come when it would be appropriate for me to say:

"Please don't ride on a Southern Railway train this summer—unless you conscientiously believe that your trip is necessary."

But that time has come... an inescapable by-product of our Nation's fight for Victory!

You see, the Southern serves the South—and the South is serving the Nation as the location of many important war industries going at top speed and more than half of all the larger training camps and military establishments in the country.

This means simply that our passenger facilities this summer will undoubtedly be strained to the limit.

Many of our passenger cars and locomotives will be assigned to troop movements.

Our regular trains and our stations are bound to be literally jammed with men and women in uniform, traveling under orders and on fur-

lough, and civilians traveling in connection with war work.

We're going to do our level best to handle this heavy load, including those civilians who conscientiously believe that they must travel.

But, until our trains and stations are no longer over-crowded by essential travel, we hope that you will patriotically forego all unnecessary travel over our lines.

I never thought the time would come... but it's here... and I know that we can rely on your cooperation and understanding.

Ernest E. Harris
President



SOUTHERN RAILWAY SYSTEM

The Southern Serves the South

Capital Scenes . . . and What's Behind Them



The General circumlocutes

THE General is a hearty old soldier. He has lived most of his life with the Regulars, and regards profanity as one of the finer parts of speech. He said that he, and never mind what he interpolated at this point, looked forward to the day when the American forces would be controlled by soldiers for the primary benefit of the United States. But he was not going to say that where any one could hear him:

"Run back through the recent history of the Army and Navy," he said, "and see how many good officers got their ears batted down because they could not keep step with the Mexican war."

He said present conditions make him think of his two dogs. The red Irish setter, he said, is perhaps the sweetest animal that ever kissed a stranger. He has big, melting brown eyes, a soft and silky coat and he is so generous that he will lead any stray dog to his cache of bones. His Airedale, he said, is a tough dog. Makes him think of human nature. His first thought is to protect the family. A king or a queen, said the General, means no more to that Airedale than a burglar. The setter, he said, goes in for canine psychological warfare. He woos the moon and lets his eyes shine through the pickets at other dogs and bones are for free. But the Airedale, said the General, is a damn sight better dog to have along in bear country.

It's a long war coming

HE ADMITTED that he is a pessimist. All professional soldiers are pessimists, he said, as Col. Charles Sweeney admits in his extraordinary new book, "Moment of Truth." When they cease to be pessimists they stop being soldiers. The General agrees with Sweeney that this will be a long and a tough war:

"Five years, six years, maybe ten."

It might take us three years to lick Germany alone. All right, all right. I'm only telling you what the General said. Lord knows, he said, what Germany's real strength is. She is fighting on the inside lines now. We are on the outside with transportation troubles.

Badger game with Japan

JAPAN'S trimming will take more years, he said. But it must be done. With the richest lands in the world at her feet,

and plenty of the cheapest labor in the world, Japan can pauperize us all if she wins. The General said he looked on Japan just as his Airedale does on a badger. The badger must be dug out and then destroyed.

"We live or die by that."

The destruction of Japan's armed forces will be a long, arduous, and bloody business. The Jappies are not smart but they are tough. Scattered through their Pacific islands, airplanes hidden by ones and twos and almost impossible to find, the Jappies will plan to wear us out. The ace in their hand—they think—is that the Allies will tire of chasing them one at a time over the whole regrettably described Pacific Ocean. But the General said we must do it. And can.

Preview of peace table

HE SAID most professional soldiers share his opinion. By the time the last little squint-eyed biological error had been run down and his head bashed in—the General still loquacious—our red setters will be under the barn crying bitterly. But our Airedales will be right in there fighting:

"My Airedale," said the General, "is just held together by his scars. If one of those old wounds ever breaks he'll go to pieces. But he's never been licked yet."

He says the Army and Navy chiefs think that sooner or later the Administration will be forced by public protest to tell the people what is really happening. When our death list—our DEATH list—touches 300,000 the people will begin to go to town. They will demand a tougher and tighter management of the war. Competent men must be put in charge. Men who know the score. Storm warnings are already flying.

Hooley and a little vanilla

HE SAYS we'll lick 'em on both ends of the war. But we will not try to clean up their nasty little minds after we've licked 'em. Remember that he is talking what the professional soldiers are thinking.

"The conquered peoples will be given a chance to give the Nazis a taste of their own medicine. We won't send any school teachers in. School teachers, hell. This is a war, dammit, and not a Chau-tauqua. No soldier expects the Jappies to quit as long as there is one fighting man able to stand on his crooked little legs.

We'll just have to catch 'em one at a time."

The General said all this talk of loving kindness after the war is just hooley with a dash of vanilla. Our men are being killed. We'll not forget that.

He thinks we're being kidded

THE General says that all the plans he has heard yet for a four-power world administration after the war, for the good of the order, sounds to him just like the Congress of Vienna and the League of Nations and all the other schemes for governing the world by force.



"We cannot govern the world," he said.

"Hell's delight, we'll be trading with Germany as soon as the peace terms are signed. So will England. So will Russia. I haven't a bit of doubt that the bedplates of a trading arrangement have already been laid down, just as was the case after the First War. Suppose Brazil wants a load of gadgets and Germany will trade 'em for what Brazil has to sell. Are we going to war to stop Brazil from doing business? You know we would not. The only thing we can do is to trade Brazil better gadgets and cheaper. We can do that."

Swing back to Gladstone

HE SAID these schemes of the brighter-eyed to set up a super-government to run the world after the war—which seems to be about what Hitler wants to do—recalls a story of an English parliamentary debate:

"I do not object," said a man in the opposition, "to Prime Minister Gladstone carrying an ace in his sleeve. But I do protest when he says that God put it there."

We're punching the bag

AGAIN he quoted from Sweeney's book and Sweeney quoted from the great strategists of history:

"We'll not win"—said the General—"until we concentrate our forces. We've been scattering."

Sooner or later we will be compelled to create a supreme command, free of all interference by civilian authority, made up of military men. Soldiers are ruthless by profession. They will do what is necessary no matter how much it hurts politicians and civilians and our allies and the suffering people of Europe.

"It'll be hell. But that way we'll win."

And Senator Truman said—

"A TOUGH overall authority to handle the war effort has become necessary," said Senator Truman. He did not use the General's stout military language. But



When *Black Means White!*

OUT OF CARBON . . . blackest substance man knows . . . comes the whitest, brightest light that man has achieved . . . that of the carbon arc lamp. With an intensity of light rivaling that of the sun, the useful carbon arc is necessary in giant searchlights for anti-aircraft defense, battleships, and other vital uses . . . in motion picture projectors . . . in sun lamps that heal and lamps that increase the vitamin D content of milk . . . in accelerated testing equipment that points the way to longer life for fabrics, paints, plastics, and other materials you use.

Without carbon and its wonders, our electrical civilization could not have been born. For without brushes made from carbon, electricity for light and power could not be generated in vast amounts . . . today's automobiles would not run . . . today's airplanes would not leave the ground.

Without carbon, in the form of electrodes and anodes, much of the highest quality steel, many of the chemicals, and other useful substances vital to this nation could not be made. For years, NATIONAL CARBON COMPANY, INC., a Unit of UCC, has studied carbon and graphite . . . their properties and uses . . . and has made useful things from them. Much has been accomplished. Through further research in carbon, more answers for tomorrow's problems are being found.

Research and engineering developments in carbon made by National Carbon Company, Inc., have been tremendously facilitated by the electric-furnace experience and the knowledge of industrial gases and chemicals of other Units of Union Carbide and Carbon Corporation.

BUY UNITED STATES WAR BONDS AND STAMPS



ACTION! CAMERA! Without the high-intensity carbon arc . . . used for photographing motion pictures and projecting them in theaters . . . we would not have the high-quality motion pictures of today.



CARBON, THE VERSATILE. In addition to its electrical uses, electric furnace graphite, a form of carbon, is used for making absorption towers, heat exchangers, and pumps for corrosive liquids; and for making metallurgical molds.




MAN-MADE INFERNO. Modern alloy steels are made in electric furnaces. These furnaces depend upon huge carbon and graphite electrodes for intense heat. They help make more . . . and better . . . steels.



LIFE SAVER. Activated carbon is necessary for gas masks to give protection against industrial and war gases. It also aids in the recovery of millions of pounds of solvents used by industry each year.

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The Prest-O-Lite Company, Inc.

PLASTICS

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THE SKY'S THE LIMIT

Every war plane that takes off into the blue symbolizes American engineering genius. But it requires more than skillful planning and workmanship to construct thousands of bombers, pursuit ships and transport planes. Huge quantities of materials must be converted into finished parts that complete the assembled units. Those materials—those parts—must be shipped by rail to numerous

destinations. That's where Union Pacific enters into the picture. Day and night, thousands of freight cars loaded with war materials roll over the rails. Great numbers of troops, too, must be transported by the railroads. All Union Pacific employees recognize the vital need for efficient, tireless work during these critical days. They're putting forth all-out effort to back up our men in service. The sky's the limit!



The Progressive

UNION PACIFIC RAILROAD

ROAD OF THE STREAMLINERS AND THE CHALLENGERS

he swung a hammer with a leaden face, at that. That kind of a hammer does not leave a scar, you know. Or not much of a scar. But it delivers the old wallop just the same. He did not use any names in his talk. But he left no doubt that he believed the war program must be conducted by a boss committee, with one big boss at the top, and free of interference by any one whomsoever. Nelson may walk the plank, as the prophets say. But a fair inference from what Truman said is that if he had been permitted to use the authority he thought he had been given, the war effort would not have been as loose and every-which-way as it has been. Nothing he said suggested a criticism of industry.

"Bill" Jeffers is Exhibit A

JEFFERS was brought on from Omaha to handle the rubber failure. He fired every man and woman he had inherited, hired 435 others, and did the job. Any other department in Washington would have had thousands at it. None of the overstuffed administrations and authorities and bureaus and committees have done as well. But he is being interfered with. Arthur D. Whiteside, an able man, experienced, and clear-minded, was brought on from New York to take care of civilian needs. Quite unexpectedly to Whiteside he was given power which conflicts with Jeffers.

"Jeffers says he won't resign," said a close friend. "But if his authority and responsibility are chipped away he'll get a 'Dear Bill' letter one of these days."

Meanwhile Whiteside is not wholly happy. If he cannot do the job he came here to do in the way he wants to do it, without any cutting in by young men who had not even been invited to the dance, he will quit. That's a prophecy.

Not nice things to say

A SUBMARINE authority—not to be quoted—said he had been depth-bombed to a fare-you-well. But submarines can take it nowadays. Their double hulls are stout:

"What scares me is the possibility that I might be caught on the surface some night when I come up for air."

Boiled down that means that the submarines are harder to kill than they used to be. The U-boats are sinking more tonnage than we built last year. We have not enough tonnage to carry enough men and materials to launch an effective attack in Europe in 1943—that is a permitted inference from a statement by General Somervell—and will not have until the U-boat menace is lessened. The best weapon against the U-boat is the smashing of their home ports as the Allied flyers are now doing, according to the authority previously quoted. But that means a long war.

Airedale stoutness is needed

THE SOLDIERS and sailors, men whose trade is killing, think the most curiously cockeyed thing in our war effort is what is called psychological warfare. They

think that, when the shooting starts, words become curiously ineffective. Maybe they are wrong. Washington loves words. Washington has a deep aversion to other people's words, however. Witness the suppression of facts about the food and the refugee conferences. The conferences were harmless, but the suppression of fact is regarded as a possible precedent.

So the OPA may die

IN THE Senate cloakroom the story was heard that Byrnes may liquidate the OPA. That delirious mass of nonsense built up by Leon Henderson has offended

Jimmie Byrnes cumulatively, and Byrnes is a politician, and knows what a political burden the OPA is proving to be. When it became necessary to ship live cattle from Albuquerque to be



slaughtered in Omaha and then ship the dressed meat back to Albuquerque to comply with OPA rules, the end was in sight. An authority thinks the OPA will simply be extirpated.

Getting back to the General

ONE WONDERS if the General was wholly right when he said that officers who would be enterprising are afraid to speak up against their chiefs.

He was right at one time, beyond doubt. Every one knows the story of "Billy" Mitchell's courtmartialing for having foretold the airplane's value. Lieutenant General Andrews—that grand soldier who was killed the other day—was demoted and sent to the sticks for demanding four motored bombers. Fred C. Kelly, who has written good stuff for NATION'S BUSINESS, has just published *The Story of the Wright Brothers*, in which he tells how the two youngsters from Ohio fought their way up against every discouragement. Not only is the book a thriller—even to an addict of whodunits—but it will be the Bible of aviators for all time to come, because Orville Wright provided the information and, together with Kelly, checked every statement of fact. The War Department ingeniously evaded giving the Wrights any encouragement whatever. They were guilty of having a new idea. Today's submarines would not be afloat if it were not for the inventions of Simon Lake. But Simon Lake could not break through the doors of the Navy Department. He is in Washington today, but is still suspected of having new ideas. Maybe not enough veneration for brass hats. But—after all—the Army is making bazookas and they may be as excellent tank-killers as is alleged. At any rate they are something new. We have other new weapons.

Herbert Corey

MANPOWER isn't the only MEASURE of PRODUCTION

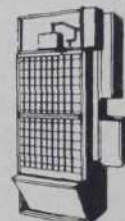


Maximum production results from *many things*... important among which is adequate control of atmospheric and process dust. Many of America's fast producing war plants know this and have called on the American Air Filter Co. to help step-up worker efficiency and protect materials in process, or finished products.

If your plant has a troublesome or dangerous dust condition, it can be eliminated. Write us about your problem.

ELECTRO-MATIC FILTER FOR ATMOSPHERIC DUSTS

Combines automatic air filtration and electrical precipitation to obtain the highest efficiency in the removal of atmospheric dust and smoke.



ROTO-CLONE COLLECTOR FOR PROCESS DUSTS

Combines exhaustor and dust collector in a single, compact unit. Eliminates extensive piping—reduces installation costs. Comes in a wide range of sizes for all industrial needs.



Please send descriptive booklet "AAF in Industry".

Name

Firm

City State

AMERICAN AIR FILTER CO., INC.

109 Central Avenue

LOUISVILLE, KY.



Money Based on Guesses

By GUSTAV STOLPER

THE MEMORY of the early 1930s ought to be revived in the forthcoming debate about international exchange stabilization.

It certainly offers positive proof that financial and monetary isolationism, whether we like it or not, is no more practicable than political and military isolationism. But it offers equally positive proof that monetary disruptions cannot be remedied by monetary means alone. Stable foreign exchanges can be maintained only in a stabilized world.

The authors of the admirable documents submitted to the public as the Keynes Plan for Britain and the White Plan for the United States no doubt are keenly aware of this. But it seems to me that we are putting the cart before the horse by starting a full-dress international debate about future exchange organizations on a most pretentious scale, before we know in what sort of world we are going to live and when this world will attain that minimum of stability without which neither plan can possibly work.

The two new and strange words which keep popping up in the newspapers—*Bancor* and *Unitas*—are names of a new international currency tentatively and unofficially suggested by the British and American governments respectively. But in truth they are meaningless. There is no such thing as an international currency.

What both governments propose is really a name for a monetary unit which is supposed never to be put into currency. It is one of those polite conventional lies which diplomacy still fancies to veil unpleasant facts. The international currency after the war will be the American dollar, if and as long as the dollar remains the expression of a specified quantity of gold.

The other nations are kindly invited under the Keynes and White Plans to fix their currencies also in certain quantities of gold, and a complicated organization shall be entrusted with the supervision and maintenance of those pledges.

The two plans have so much in common that, for a first appraisal, it hardly seems fitting to harp on the

differences. The American plan seems to be much more ambitious in that it provides for an international Super-Bank over all treasuries, central banks and Federal Reserve systems of the member nations. The English plan suggests simply an international clearing union, in which the total of credit and debit balances must approximately correspond to one another much as do deposits and investments and loans in the balance sheet of a domestic bank.

Secretary Morgenthau presented the White Plan to Congress as a sort of magnified stabilization fund on the basis of an enlarged Tripartite Agreement. This, we may remember, was an agreement made in 1936 to stabilize the relation between the dollar, the pound sterling and the French franc.

But this is not as happy a precedent as the Secretary seems to assume. It worked perfectly in our relation with England, where it really kept fluctuations of the exchange value between dollar and pound to a minimum. But it did not prevent, it did not even retard, the financial collapse of the third partner, the French franc. There is nothing more illuminating than the experience with this Tripartite Agreement.

Currency fluctuations are never the cause, they are the effect of an evil. That evil is the disruption in the economic and financial balance of those countries whose currencies break down. We know from bitter experience that this evil is bound to spread rapidly beyond the confines of its origin.

It will be recalled that, when the Austrian Creditanstalt went bankrupt in May, 1931, a German bank holiday became inevitable within a few weeks despite the heroic effort of the Hoover administration to dam the flood, by means of that historic International Moratorium of June 19, 1931.

After another two months, England was forced off gold and, from that moment on, the struggle to maintain or restore financial stability in the United States became growingly hope-

less until finally gold was nationalized and the dollar devalued.

There is an aura of strange unreality about both the Keynes and the White plans. Both admit that they can deal only with short-term fluctuations. If the balance of payments of one country should suffer from an earthquake or a crop failure of one of its principal export products, it could be tided over until it regained its former status. But for such contingencies we do not need such a complicated organization as now proposed.

Unanswerable questions

THE PROBLEM with which we shall be confronted when this war is over is how, when and where a balance so utterly destroyed by the war can be restored at all.

Czechoslovakia, to choose a striking example, was economically one of the strongest units in Central Europe. It had a substantial industry, an efficient agriculture and a considerable share in international trade. As one of the "United Nations" it is supposed to be a charter member of that new international Stabilization Fund or Clearing Union. But what will Czechoslovakia be after this war? When will it regain its strength and economic balance?

The doubts multiply when we think of other countries, of Poland, of Yugoslavia, of Greece.

How easy will it be to fix the value of the future French franc in terms of gold, before we know when France will be a politically and economically consolidated nation again?

How are we going to fix the Dutch guilder before we know what is going to happen to the Dutch East Indies, with their rubber and tin having lost their most important markets?

It seems to me that it is hardly advisable to start controversies about quotas, representation on boards of directors, and veto powers, with all the inevitable suspicions and antagonisms cropping up in such international conferences, before we know how the fundamental issues can be settled, and particularly which part the United States is going to play in that process.



Copyright 1943, The Pullman Company

Dear Bill — The Navy doesn't cry

"But I *did* want to see you so!

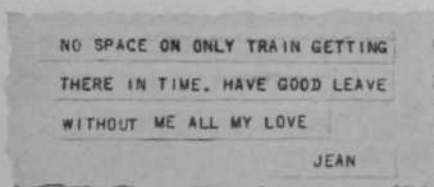
"Your telegram was almost as good as news that the war had ended. It's kinda crumpled now, because it spent the night underneath my pillow.



"I tried frantically to make it, but the plane was completely sold out and the only train that would make it in time was all-Pullman and every berth was taken. The railroad and Pullman people were wonderful about trying to help me, but they just couldn't get me on it.

"There was always a chance, they said, of a last minute cancellation, so I even packed up and went to the station. And Bill, I *prayed*. But nothing was turned in.

And my heart sank as deep as an anchor when I had to send that wire.



"Oh, Bill, it would have been *heavenly*. A whole 24 hours together! Why, that's *almost* as much as we had for our honeymoon before you went to sea.

"It's hard, dear, desperately hard, not to cry—just a little bit—even though you told me the Navy never does. But I promise to smile all day Sunday, pretending I'm with you. And you smile, too, darling—please, *please* do—and don't let it spoil your leave. Just one of those things that can't be helped, I guess, with the war making travel so heavy.

"But I'll always wonder—

"Was there *someone* who had reservations on that train—someone who couldn't go and *didn't* give up the space? Only a very thoughtless person would do that these days, Bill, but if it *did* happen—if there *was* a wasted bed on the train that went without me—

* * *

You never know how important the space that you can't use may be to someone else. So please cancel reservations promptly when plans change.

To avoid wasting accommodations, we must have your cooperation because passenger travel is the heaviest in history and an average of almost 30,000 troops a night now

GO PULLMAN

Buy War Bonds and Stamps REGULARLY!

Here at last... the answer to Corrosion Problems **ANTI-CORRODE**

New Liquid Safeguard Developed by Cities Service

Anti-Corrode, Proved Perfect by Months of Laboratory Testing, Meets Severest Corrosion Requirements. It's Economical and Easy to Apply.

After months of laboratory research and rigorous service tests, Cities Service takes pride in announcing the development of a new and completely effective corrosion preventive—Anti-Corrode.

This new liquid safeguard, by virtue of its special properties, and its reasonable cost, is regarded as a perfect answer to today's vital problem of metal conservation.

METHODS OF APPLICATION

Anti-Corrode can be applied to raw stocks, finished parts, or to completed machines during storage, assembling or shipping—by dipping, brushing, rubbing, hand or power spraying. It provides a safe film which does not harden, become brittle or crack.

CHEMICALLY INERT

Anti-Corrode is chemically inert to ferrous or non-ferrous metals. Therefore, it can cause no injury to any metal to which it is applied or with which it may be brought in contact.

Anti-Corrode is compatible with drawing compounds; there is no need to remove it from metal about to be drawn, stamped or otherwise formed.

WEATHERING

Anti-Corrode is not affected by rain, salt air, oxygen bearing moisture, etc.

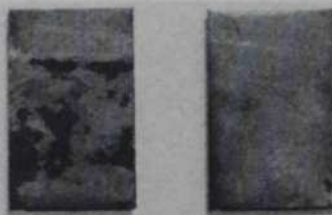
ECONOMICAL

In accordance with regular U. S. Navy Test procedure, Anti-Corrode proved far superior

to other leading anti-rust compounds costing as much as 25% to 40% more per gallon.

Whatever metal equipment you may have, you owe it to yourself to investigate the money-saving advantages of this remarkable new metal-saving product. One gallon of Anti-Corrode protects approximately 1200 square feet of sheet metal. Send the coupon below for information on how you can obtain a sample of Anti-Corrode.

ANTI-CORRODE MEETS U. S. NAVY TEST



BOTH STRIPS of freshly-ground steel pictured here were immersed for 20 hours in a 3% salt solution. Strip on left was untreated; strip on right, coated with Anti-Corrode, shows no trace of rust. (Even after 90 hours of immersion, Anti-Corrode coating still resisted rusting.)

Cities Service Oil Company
Room 1389
Sixty Wall Tower, New York

Gentlemen: I'd like to test Anti-Corrode on my own equipment
FREE OF CHARGE. Please send me details.

Name.....
Title.....
Company.....
Address.....

OIL IS AMMUNITION—USE IT WISELY!



CITIES SERVICE OIL COMPANY
NEW YORK • CHICAGO

IN THE SOUTH
ARKANSAS FUEL OIL COMPANY
SHREVEPORT, LA.

are enthusiastic in their recognition of the untold good that it is doing to help sustain industry's remarkable war-time record. No longer is a man appointed to a foreman's job on Saturday, given a textbook to read on Sunday and expected to soak up executive ability, plus qualities of leadership and knowledge of how to handle men in one easy lesson. This handling of men, for instance, covers a lot of territory.

Beating temptation

IF HE is a foreman in an Illinois plant, there's a November 10 problem that may be typical. The pheasant season opens that day and, for the next six days, the shotgun resting in the closet is a terrific temptation to any number of men in the production line. So the foreman's duty—particularly in medium-sized plants—is to convince his "soldiers" that, if they don't hunt pheasants here, the time saved and the production gained will directly help our boys to hunt Nazis and Japs over there.

In many cases the boss of today was the foreman of yesterday and appreciates the advantage of these foreman clubs as a means of keeping contact with the men on the firing line. While much publicity has been given to Management-Labor Committees, there has been practically no mention of the good which foreman clubs were doing long before this emergency and the good which they are doing now.

If you're a company executive, here's what foreman club leaders would suggest as the best way to help: Stop in at some of the meetings which your foremen attend. That is the kind of pat on the back that your men want.

Then and now

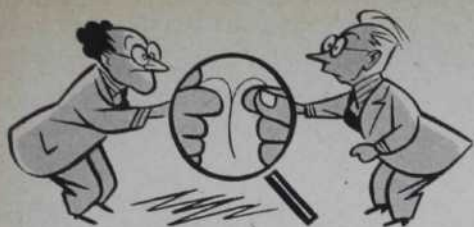
TWENTY-FIVE years ago the phrase "crack-down" hadn't crept into our national lexicon and there were no federal plain-clothes men to enforce "national unity." An item from the "Twenty-five Years Ago" column in the Woonsocket (Rhode Island) *Call*, reminds us of the way things were done in World War I.

The public conceived a plan to wear low shoes instead of high shoes, to save leather.

"Woonsocket shoe men will specialize tomorrow in selling low shoes," said the item, "in order that the local and vicinity people may correctly observe the following day, Sunday, and thus perform a patriotic duty by donning low shoes instead of high ones."

"The Rhode Island Retail Shoe Dealers' Association, of which several Woonsocket shoe men are members, has taken an active part in seeing that low shoe day throughout the state be properly observed, as it has met with the hearty approval of government authorities."

Prentiss Brown is asking for 1400 more agents, and announces that citizens who report violations will not have their names divulged.



The Law:

GOVERNMENT needs almost 9,000 attorneys in Washington to meet legal problems of war

THE Office of Price Administration, at latest count, had 1,821 lawyers on its pay roll—as lawyers—and unnumbered other persons with law degrees working in administrative, investigative and clerical posts.

This, says Price Administrator Prentiss M. Brown, is too many lawyers and not a few citizens agree with him.

Sleuthing around the Board of Legal Examiners, a branch of the Civil Service Commission that passes on all Government lawyers earning between \$1,800 and \$3,200 a year, we learned that OPA's legal staff is only a fifth of the Government's total battery.

"Why, 8,800 lawyers are employed as such by the Government," the clerk said, rather proudly. "Since the President proclaimed the National Emergency in 1940, we've put some 3,400 lawyers in civilian government agencies."

The second largest bloc of lawyers in the Government is in the Department of Justice, which lists 1,500. This does not include the G-men, most of whom have legal training, or holders of law degrees who work in other posts. The Veterans' Administration has 922 lawyers.

The Treasury has 446 lawyers, 332 of whom spend all their time on income tax returns and other problems in the Bureau of Internal Revenue. Mr. Ickes' Department of the Interior has 267 lawyers, although Jesse Jones' Reconstruction Finance Corporation (which includes, among many other agencies, the Defense Plants Corporation, largest in the world) has less than 200.

The War Production Board has only 76 attorneys, as such.

Having collected these interesting figures, we dropped over to the American Bar Association to learn what they could tell us about government lawyers and employment practices surrounding such. The ABA cooperates with the Board of Legal Examiners in seeing that all government attorneys earning between \$1,800 and \$3,200 a year are examined properly. Further, it recommends attorneys for commissioning in the armed services and for posts in the Government paying more than \$3,200 annually.

Just why could not be ascertained, but if the Government pays a lawyer more than \$3,200 a year he can thumb his nose at the Board of Legal Examin-



A Tradition of ACCURACY

The engineering skill, the ultra-exacting standards of accuracy, the modern manufacturing methods, responsible for Monroe supremacy for a quarter-century... are being used to speed Victory.

Army and Navy engineers have selected our plant for special tasks that require just such a background of precision designing and *Nth* degree accuracy in making fine equipment. For the duration Monroe will concentrate on production for war; when peace comes, Monroe will be better equipped than ever to hold its position of leadership.

Because war industries must have an ever-growing volume of accurate figures and records to speed production, certain models of Monroe machines are available under WPB regulations.

Let a Monroe expert analyze your figure work and suggest time-saving short cuts; keep your Monroes operating efficiently through regular inspections by trained specialists under our Guaranteed Maintenance service. Call the Monroe branch nearest to you, or write Monroe Calculating Machine Company, Inc., Orange, New Jersey.

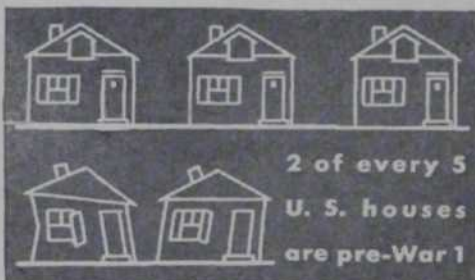
MONROE

Machines for Calculating, Adding and Accounting

POST-WAR HOUSING

14 MILLION OVER-AGE HOUSES

The size of the replacement market for houses in the U. S. is no longer a matter of guesswork. Recently-tabulated census figures show that 14,175,296 existing dwelling units were erected prior to 1910. That's 40% of the total! Of this 14 million—2,539,837 date from before 1880. At the home construction rate of building's peak year—1925—we could be kept busy for almost three years just replacing these pre-1880 houses. Are over-age houses necessarily obsolete? In view of the advances made since 1910 in design, heating, lighting, insulation, methods and materials—the answer is "yes"... A primary advance is engineered housing.



Engineered housing

—as developed in Homasote Precision-Built Construction—produces stronger, more efficient homes for less money.

Homasote decentralizes prefabrication, result of seven years' research at a cost of \$300,000... Notice "decentralized"—Homasote reduces transportation costs by locating fabricating plants throughout the country. Thus it works with established local factors in building... Homasote Precision-Built Construction builds homes of any size, any style, anywhere. Not stock houses—complete flexibility of design.



Proved in \$6,000,000 of pre-war, architect-designed private homes and \$30,000,000 in government war housing, Homasote Precision-Built Construction is the key to vast, post-emergency markets—low-cost housing, employee housing, realty developments in all price classes... For more details, write HOMASOTE COMPANY, Trenton, New Jersey.

HOMASOTE
Precision-Built
HOMES

ers (if he wishes, of course), unless someone raises a question about his fitness. Then he must be examined.

"Lawyers are carrying a big load in the war," a spokesman at the ABA told us. "War brings more legal problems than you think... lawyers are the backbone of our war effort in Washington."

There are now 15,000 lawyers in uniform serving in every type of war job wherever the flag goes. Since, according

to the last census, there are only 180,000 lawyers in the country, this leaves only 156,000 attorneys guarding the rights of civilians.

Perhaps that is why Dr. Frank P. Graves, former New York State education commissioner and holder of 42 college degrees, decided when he was 71 years old to go back to college and study law. He will get his degree from Albany Law School in June.



J. Atlee Schafer (left) takes over as Harry Jones ends his stint at Warner & Swasey. Both work all day elsewhere

White Collar Mechanics

VISIT some of the nation's busiest war plants and you'll find dungareed business men, lawyers, doctors, editors and men from many other walks of life working on the production line as their contribution to the war drive.

The Warner & Swasey Company at Cleveland, for example, has recruited 183 "half-shift" teams of business and professional men who go about their regular occupations during the day, and work four hours a night in the machine shops of Warner & Swasey.

One such team consists of J. Atlee Schafer, president of the Schafer-Suhr Coal Company, and Harry Jones, fuel engineer of the same firm. Jones works from 4 to 8 p.m. six days a week, and Schafer carries on in the same job from 8 p.m. until midnight.

"There was so much talk about a shortage of manpower that we took Mr. McNutt and General Hershey at their word," said Schafer. "So, be-

tween us, Jones and I turn in a full shift assembling turret lathe gear boxes."

Schafer, a member of the Cleveland Chamber of Commerce and active in Cleveland civic affairs, also works a full eight-hour shift every other Sunday. He's 48; Jones is 50.

In Nappanee, Ind. (population 3,000), the whole town is on a war footing and practically everybody works at a war task. Vitreous Steel Products Company recently put an ad in the Nappanee paper calling for extra help, and got amazing results.

The local editor's two sons, the undertaker, school teachers, a gas station owner and many others responded and are now working in the company's Nappanee factory at night—some of them four nights a week, others five or six nights.

"They are a grand crowd to work with," said a company spokesman.



America's Roads to Victory are boulevards of steel and stamina

"FASTER, faster," is wartime America's cry to the railroads. Speed the troop trains! Speed the supply and munitions trains! Speed the critical materials to the factories!

It's a challenge the railroads are taking in stride. They're coming through on every assignment, even though their need today is more new equipment than is available under existing priorities.

The railroads are mastering war traffic problems because they were ready with a modern plant that, in recent years, had been utilized to only half its capacity.

The Milwaukee Road, for example, prepared with new power as well as new freight and passenger cars, in the decade before war struck. It improved more than 2,000 miles of track with heavier rail and new ballast. It rebuilt

over 80,000 lineal feet of bridges. It reduced curvatures to permit faster schedules... and 500 grade crossings were eliminated or provided with automatic protection.

These improvements, plus heavier tonnage on both cars and trains, account

for The Milwaukee Road's present ability to double its load. Aided by the co-operation of business and government shippers, its 35,000 loyal determined employees are ably handling their tremendous responsibilities.

The Milwaukee Road and the other railroads constitute one of our vital war industries.



THE MILWAUKEE ROAD

11,000-MILE SUPPLY LINE FOR WAR AND HOME FRONTS

Sick Call in the Army

By HERBERT COREY

THE tall lad from the hill country said dang if he would show up at sick call. There wasn't nothing the matter with him, only a cold, he said, making an improper use of the double negative and taking a non-insurable chance on the top sergeant in the same sentence. He was plum tired of being babied, he said. It got so in this man's army if a man got a bit of dirt in his eye they called up the reserves.

He said no more. The top sergeant was looking at him. In the better army circles it is now regarded as a social error to call a rookie the names he should be called, but no rule says a top sergeant can't look. Any rookie who withstands the full power of a top's look automatically becomes a brigadier general.

"Sick call," said the top sergeant.

"Yes, sir," replied the rookie.

Maybe the men of the Army are be-

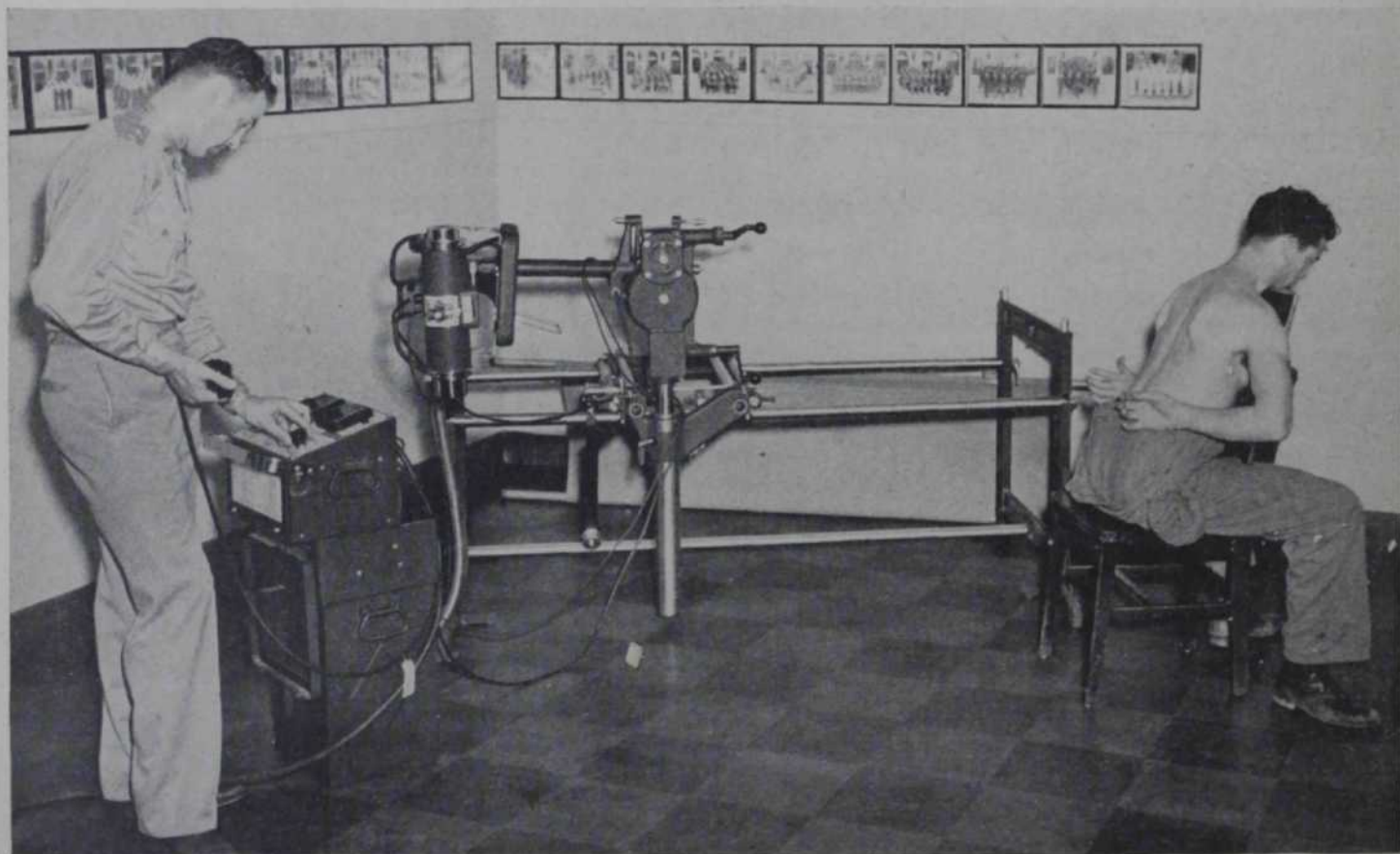
AMERICAN soldiers are not only healthier than other soldiers—they're healthier than civilians

ing babied a little bit. That depends on the meaning given to the word. The result, however, is that the American Army is an unbelievably healthy army. Supporting statistics will be brought up later. There is no doubt that the men are tough. Bataan, Guadalcanal, Hill 609 may be offered in evidence. The American theory is that a man is a better fighter if he is free of chills and fever, cooties, and indigestion. The book has been closed on the Spartan days of the past. The first Regulations of the American Army, written by the Inspector General, Major General Baron von Steuben, directed that:

"Fresh straw shall be provided for the sick and wounded."

That was all the Baron had to say about the sick and wounded. In those days surgeons gave a man a bullet to chew on while they hacked off his leg. Boiling tar was an antiseptic. Methods have changed with the years but the basic thought of the von Steubens of 1779 and the medical departments of all armies remains the same. Battles are won by healthy soldiers. A sick soldier needs about one sound person to take care of him. But he gets the service.

In the field these attendants would begin with the stretcher bearers who work from the front line to the collecting stations, the ambulance men who carry the wounded back to the dressing stations and, back of them,



ARMY SIGNAL CORPS

"The mission of the Medical Corps is to conserve manpower." To do that, it makes a practice of catching a sick man and using the modern scientific equipment



U. S. Army Signal Corps Photo

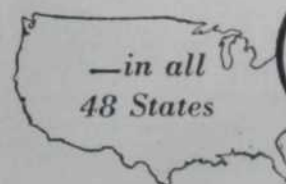
HOW MANY FIGHTING MEN IN THIS PICTURE?

You see four . . . in the thick of battle . . . banking their lives on the mechanical fitness of this all-American "smoke-wagon."

Backing them up are the thousands of unseen workers on home production lines. Some shaped the intricate parts of the armored patrol car's engine. Others forged the steel. These parts made by thousands of workers go into every tank, truck, jeep, plane, big gun or ship . . . are produced in hundreds of plants scattered clear across America.

Yet each of these plants can count on a nearby, convenient source for fine Texaco Industrial Lubricants . . . on Texaco's specialized engineering service . . . from any one of more than 2300 Texaco wholesale supply points.

THE TEXAS COMPANY





There **IS** a Doctor in the House

Business men alert enough to ask—"Is there a doctor in the house?"—are witnessing effective cures of many of the ills besetting business today. In thousands of these cases, the Morton Method has shown that there *is* a doctor in the house of any business.

This "doctor" represents the intimate, on-the-job kind of knowledge possessed by the employees in any business. It's the kind of knowledge which enabled one tool room employee of a war-busy ordnance plant to combine two operations into one, thus conserving valuable man-hours and saving the company over \$4,000.00 in a year.

To date, the Morton Method has lowered costs, improved methods, increased production and raised employee morale for more than 9,000 different business establishments. No untried, untested theories are embodied in the Morton Method. It provides the solutions to concrete business problems by stimulating and directing *employee thinking* according to a proved, unified plan; and then making it extremely easy for management to have access to the results of that thinking.

This professional, highly effective method of remedying specific conditions has never yet failed when operated properly. Time after time, it has demonstrated that, no matter what the business, there *is* a doctor in the house. For details, write or telephone.



MORTON MANUFACTURING CO.
SUGGESTION SYSTEM DIVISION
329 N. LEAMINGTON AVENUE • CHICAGO, ILLINOIS

the innumerable hospitals, rest camps, boats, trains, doctors and nurses.

When the growing American Army was at the 1,400,000 stage, it was officially estimated that this force would require 70,000 beds, 8,500 medical doctors, 2,100 dental surgeons, 8,500 nurses, and 67,000 enlisted men. This does not take into account the almost innumerable other men and women who serve the Army's sick and wounded directly or indirectly. The chances of illness or injury in active service vary with conditions, of course, but common sense dictates that only men in good physical condition should be sent to the combatant forces.

"The mission of the Medical Corps

goes that stern babying to which the young man from the hill country objected. Only 42 per cent of the first 19,242 registrants were inducted as practically perfect physical specimens, although another 30 per cent were rated fit for limited service. The earlier qualifications have been eased somewhat as the Army has grown, but it is likely that the percentage of physically fit registrants has remained about the same. The business of the army doctors is to keep fit and make fit the men mustered in. A sniffle may indicate only a cold, but a cold may be any one of a number of things. A man with a dull ache may be heading toward meningitis.



ARMY SIGNAL CORPS

A sick soldier needs at least one healthy person to take care of him. In the army he gets the care he needs

is to conserve manpower" is the Constitution and Bill of Rights of the Surgeon General's department. "The selection, maintenance, evacuation and hospitalization."

This article has chiefly to do with the care of the soldier's health on this side of the water. What happens after he reaches a combat area is another story.

In the training camps, he under-

Therefore the sniffer or the man with the ache is caught before he gets far with his affliction. The results have been incredible. The man in the army, take him as he flies, is healthier than he was at home under Mother's ministrations. The longer he stays in the army the healthier he gets. There is more than a trace of truth in the old army ballad which General Terry



**His call today may
prevent a delay in
her work tomorrow**

MANUFACTURING FOR WAR

Manufacture of aircraft equipment for the Army Air Forces, and the manufacture of Burroughs figuring and accounting equipment for the Army, Navy, U. S. Government and the nation's many war activities, are the vitally important tasks assigned to Burroughs in the Victory Program.

An ounce of prevention is still worth a pound of cure—especially these days when time and manpower are at a premium. A phone call will bring a Burroughs service man when you need him, but it's far wiser to arrange with Burroughs for periodic inspection, lubrication and adjustment of your Burroughs machines, so that emergencies, and the delays they entail, may be prevented. The Burroughs service man is the best answer to the ever-mounting problem: "How can I get the most out of my present machines, and make them last for the duration?" He is factory trained and factory controlled, and makes replacements with genuine Burroughs parts. His work is guaranteed by Burroughs. For full details, call the local Burroughs office.

BUY YOUR SUPPLIES FROM BURROUGHS—Users of all types of office machines find that Burroughs ribbons, carbon paper, roll paper and other supplies cost no more—assure better, more uniform results.

BURROUGHS ADDING MACHINE COMPANY • DETROIT, MICHIGAN

Burroughs

ADDING, CALCULATING, ACCOUNTING, STATISTICAL, PAYROLL AND BILLING MACHINES



FLYING FORTY

ACRES OF POTATOES WITH A
SINGLE TRANSPORT PLANE

POATATOES are a bulky, heavy commodity to transport by plane or ship — and enough of them to feed just a single company of soldiers requires much critical cargo space.

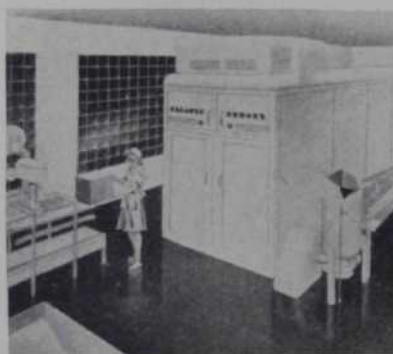
But the same potatoes—cleaned, peeled, and most of their 80 — 85 per cent water content removed by dehydration — are reduced in bulk and weight so that a single transport plane can easily fly a large field of delicious potatoes to Iceland or Guadalcanal.

The modern science of dehydrating almost all vegetables and foods makes this possible. Good use of it is made in shipping food in compact, lightweight form, to our soldiers and Allies overseas.

Cleaver-Brooks Company engineers — skilled and experienced in the design and building of

highly efficient steam generating equipment — are taking a leading part in the fast developing art of food dehydration. They have developed a complete "packaged" unit of dehydrating equipment as well as an unusually successful, improved method of practice.

This division of Cleaver-Brooks Company is another of its many activities directly keyed to the needs of the nation at war.



Cleaver-Brooks

MILWAUKEE

COMPANY

U. S. A.

SERVED BY CLEAVER-BROOKS PRODUCTS



Factory



Farm



Highway



Institution



Military

Allen, commanding the famous First Division in Tunisia, sings with devotion between fights:

"Old soldiers never die. They only fade away."

Perhaps this statement seems overly encouraging. There is a school of thought which is reluctant to believe that the men in the army are able to stand up without crutches. So let us look at measles by way of evidence. Do not laugh because measles is—or are—the verb depends on whether you are a purist or have got 'em—an infantile trouble. Measles in the army is plain hell. In 1917 military measles was a killing disease. In the army in 1940 no measles were reported. In 1941 there were so few that the rate was too hard to calculate. In 1942 there were no measles. So far in 1943 none have been reported. The same statement, in a general way, may be made of other diseases.

This increase in army health may be credited to two causes.

Antiseptic Model T

ONE is the improved methods of the medicos, plus the new and miracle-working drugs.

The second might be traced back to the old Model T and the cheapest gasoline in the world.

The young folks of 1943 may be immunized to some extent. In 1914 a great many of the recruits came from remote districts. Many of them had never even heard a freight engine whistle, not to speak of seeing a train. They just didn't believe in the telephone. Log cabin treatment for disease involved poultices, country store dopes, boneset tea and calomel. The chance of infection mounts rapidly when men are gathered from all parts and placed in one great herd. An infectious man might spread his trouble to a regiment before he could be isolated.

City and country boys swapped their regional sicknesses. The army had been on one of its intermittent declines and was short of doctors and nurses, and the national tone was of let's get into this scrap before it dies on us. Ten miles was a long way to town if you had to drive the mare which had been hauling something all week. Therefore the boys—and girls—stayed mostly in their own coves and crowds. They had their pet troubles and diseases.

After the First War, Mr. Ford's Model T began to gain popularity. The boys came whooping down the mountain, not merely on Saturday night but on any other night. Forty miles each way to a shindig was nothing at all. A 300 or 400 mile drive to a party was feasible because the revellers could spell each other at the wheel. The whole country began to get acquainted with the whole country's illnesses. It was a kind of vaccination by automobile. The theory is held in responsible quarters, at least. The character of these shared diseases became more moderate.

In a word a wholesale immunization was practiced.

If this seems undue praise for the Model T, the reader may add the names of Chevrolet, Dodge, or any other motor company which pleases him.

The success attributable to the advances in medical science rests largely on the catch-'em-quick plan. If a soldier is unwary enough to drink some of the Prohibition era whisky which is to be found in some regions and therefore appears at parade with sacks under his eyes he is likely to go to sick call at once. If the top sergeant suspects him, he goes on the double even if his head jars off on the way. One result is that admissions to hospitals seem unduly numerous. Another is that a disease is handicapped from the start.

Medical inspection is never-ending, and is a bore and annoyance, but it does the work.

The meningitis record is offered as proof. Every one knows what a terrible disease this is, but if caught in time it can be tamed. The symptoms are well known, even if now and then they prove to be symptoms for something else. But the trick is to catch them early.

In the civilian population at present, 8.7 cases are reported to the 100,000 and 4.5 deaths are reported.

In 1917 mumps attained an evil popularity in the army. Today there is very little. Perhaps no one ever died of mumps, but it is nothing to play around with. The death rate for all diseases, as shown by a complicated logarithm, is not only phenomenally low, but is lower than has been reported from any other army in the world. The rate is actually



ARMY SIGNAL CORPS

Soldiers in World War I sometimes infected each other

only two to 1,000 from all causes and less than half are from disease.

Reports show that the men are healthier who come from wealthy counties. In these the young physicians settle on graduation, for understandable reasons. The less prosperous counties, served by older physicians who have in many cases not been able to keep

50 YEARS OF PROTECTION

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Mr. J. F. McFadden, President,
American Credit Indemnity Co. of New York,
First National Bank Building,
Baltimore, Maryland.

Dear Mr. McFadden:

Congratulations on the 50th Anniversary of American Credit Indemnity Company! Achievement of such a significant milestone must be a real pleasure to you and your fellow executives.

My own pleasure in extending these greetings is enhanced by the fact that your Golden Anniversary year is also the 25th anniversary of relations between our two companies . . . twenty-five consecutive years, may I add, of very pleasant relations.

Our accounts receivable have been insured by your Company since 1918, from the First World War, through the depression of '21, the boom of the latter twenties, the Great Depression of the thirties, and now during this chaotic war period. During those years, our accounts have been securely protected against severe credit losses by your policy.

May the future of your Company be as illustrious as the past though your accomplishments unlimited . . . may the next 50 years be a period of tremendous growth and achievement.

Sincerely,
McQuay-Norris Mfg. Co.

Arthur G. Drefs
Vice-President & Treasurer.



A.G. Drefs.
MTG



J. F. McFadden,
PRESIDENT

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Baltimore

"Guarantees Payment of Your Accounts Receivable"



I'M A SMOKE EATER FROM 'WAY BACK

● Many years ago, I drove a Ward LaFrance pumper to many a fire. It never let us down. Neither has the Ward LaFrance equipment we've bought since I became Chief. Today you've got to have an urgent need for fire apparatus to be able to get it—but since we've been buying Ward LaFrance pumpers exclusively for years, we can depend on the ones we have, for the duration and then some. I'm glad to hear Ward LaFrance is turning out big Tank-Recovery Wrecker units and fire trucks for the armed forces. That means our boys are getting the kind of equipment it takes to win a war.

P. S. Ward LaFrance is a name to remember after this war is won. It stands for special trucks, engineered and built for the job to be done. No matter what your requirements, you'll probably find custom-engineered and built trucks are the economical, efficient, profitable kind of vehicle to buy. It's none too soon to make preliminary inquiries concerning your future requirements. Our experienced engineers will welcome your letter.

WARD LAFRANCE TRUCK DIVISION



ELMIRA,

NEW YORK



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abreast of modern medicine, send a greater proportion of inducted men to the army hospitals.

The supply of physicians is lowest in the counties which have no hospitals and rises, roughly speaking, as hospital beds are put in.

Influenza is the nightmare that keeps army physicians tossing at night. It has not been troublesome as yet, but no one has forgotten what happened in 1918. It is comforting to know, however, that the virus can be isolated and that the preventive vaccine is beyond the experimental stage.

The sulfa drugs, too, can prevent some of the complications common in past years.

The respiratory troubles—the common cold, tonsillitis, bronchitis, and pneumonia—are the most troublesome. Second in importance are those of the intestinal tract, such as diarrhea and dysentery. These show up most frequently on maneuvers, when sanitary conveniences simply do not exist, and thirsty men fill their canteens at the first creek, no matter what the orders may be. At one time yellow jaundice followed the "shots" against scarlet fever, but that has been stopped. One outstanding cause of infection is the rapid turn-over of new troops, because men who are harboring an undetected disease germ often pass it on.

Mosquitoes like buzzards

THE CIVILIAN areas surrounding some of the camps are full of malaria, too. Not much can be done about that except to catch the cases and cure them. But that is done in a hurry.

There are two theories as to why some of the southern camps were located where they were located. One theory is that those responsible knew that the new army would soon be getting into jungle swamps and wanted to get the new soldiers accustomed to mud and mosquitoes.

The other theory will simply not be stated here.

It is a fact, however, that some of those southern camps were set down in the middle of mud and water areas and that mosquitoes the size of buzzards grew in them. Another fact is that, according to Gen. James Stevens Simmons, chief of the Preventive Medicine Service, "throughout the century and a half the medical department of the army has been continually fighting this ancient military scourge."

During the 61 years after 1818 the annual admission rate of white troops ran from 200 to 1,000 to the full strength of the regiment. The death rate ran as high as 2.7 to 1,000. Then the mosquito's part in this deadly business was discovered.

So far as this reporter knows, the army camps have been made practically mosquito-proof. Half a dozen agencies have shared in this work, including the Army's Preventive Medicine Service. The Commission on Tropical Diseases, the Army Board for the Control of Epidemics, a subcommittee of scientists



DELIVERIES FOR YOU INSTEAD OF TO YOU

● Although everything we make today goes to war, it is going to work for you just as surely as though we could deliver it for your own use in your own plant. For today all of America is in business for Victory, and whatever helps the war effort helps us all. Right now "Connecticut" equipment is hard at work all around the globe—precision electrical products, different in detail, but not in basic design, from the ones you'll be using after victory. Once this war is won, and present military secrets become open knowledge, you'll know about "Connecticut" products from your partners, the boys who are using them today. Chances are you'll be using many electrical devices, born of this war, to speed and control peace time production. We hope to continue working with you then.



CONNECTICUT TELEPHONE & ELECTRIC DIVISION



MERIDEN, CONNECTICUT

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from the National Research Council, federal and state agencies, the Rockefeller Foundation, the Red Cross, and the Department of Agriculture. Because a mosquito refuses to recognize reservation boundaries, some areas surrounding some camps have been sanitized. This keeps down chills and fever in the camps, but when the men go on maneuvers through the mud:

"The mosquitoes," said one authority, "bite like hell outside."

The Medical Department's task was made more difficult when the Caribbean bases were obtained. In Trinidad a tree-living mosquito was discovered, along with other varieties of malaria carriers in the mosquito family. Apparently the only way to get rid of the tree-livers was to cut down the tree. So far as possible, the soldier is protected against mosquito bites, infection if bitten and illness if infected. There is no nonsense in this campaign.

The line officers are ordered to be as alert against the mosquitoes as against the Japs, and as Colonel Simmons says:

"Only by the determined efforts of thoroughly trained officers can we hope to outwit and outfight the mosquito carriers of this disease."

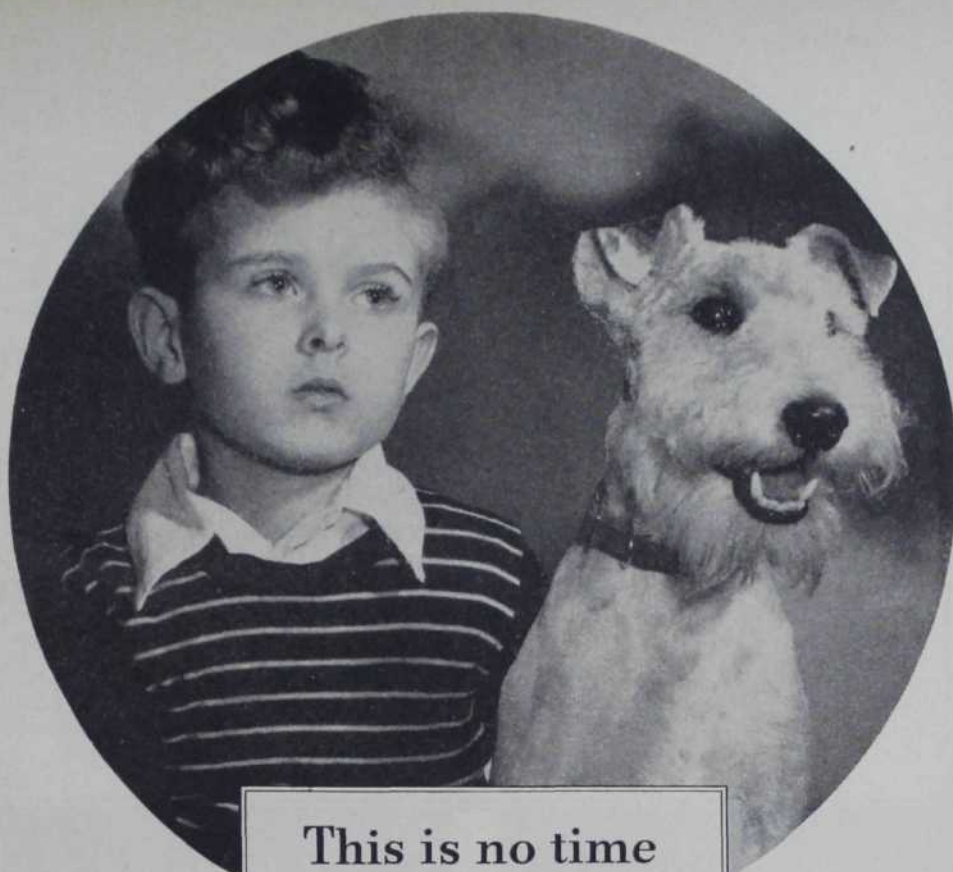
But there is hope. The Army is giving the mosquito a run for his life even in the overseas fighting where troop movement and battle interferences make protection more difficult. A mosquito-repellent solution has been developed which keeps mosquitoes at bay for ten hours. It does not kill them, but it sends them away staggering. A spray has been invented which not only kills all flies and mosquitoes but which may in case of necessity be distributed by means of a bomb.

It may seem funny, in a way, to think of fighting troops laying down a barrage against mosquitoes before shelling the Japs but, on second thought, the element of humor seems to be almost completely absent.

Perhaps the most important advance in this war against insects is the cootie-killer. Every veteran of the First War will be able to speak with authority about cooties. They carry disease germs, including the germs of typhus. They are weakening, degrading and irritating. In the First War, troops in the field simply could not deal with them. When the men were worn out—often as much by the cootie as by the Boche—they were retired to a rear area, given a bath, and their clothes sent through a steam cooker.

Taming the cootie

THE DEATH rate directly attributable to the cootie was less in the American army than in others. The Germans and Russians suffered enormously. Delousing in the winter time was often impossible. Now a cootie-killing powder has been invented which will not only rid an infected person of the little terrors "in a short time," but will actually clean them out of his clothes. Even after the tenth washing of his underwear, the powder continues to protect. The same



**This is no time
to get rid of one's
bodyguard**

AS LONG as you drive a car you still need the protection insurance can give. Automobile mileage has been rationed, but driving hazards continue.

Today Hardware Mutuals offer *new, drastically lowered auto rates*—plus the opportunity for dividend savings that have averaged 20% of auto premiums paid since 1914. And you get the thorough protection assured by Hardware Mutuals *policy back of the policy*.

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may be able to increase your coverage at no extra cost.

Hardware Mutuals *policy back of the policy*—our way of doing business—makes your interest our first consideration. Sound, efficient management and careful selection of risks have returned a total of over \$82,000,000 in dividend savings to policyholders.

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CASUALTY AND FIRE INSURANCE

★ ★ ★ MORE GOOD NEWS FROM THE PRODUCTION FRONT ★ ★ ★

A REPORT TO THE NATION

*on General Motors' Production, Employment,
Economies and Profits*

PRODUCTION



TODAY THE COUNTRY'S LARGEST PRODUCER OF WAR MATERIALS

During 1942 war production in General Motors increased rapidly. Deliveries in the fourth quarter were more than four times those in the fourth quarter of 1941 and were at an annual rate of more than three billion dollars. In reality, war production increased far more rapidly than dollar value indicates—thanks to decreases in cost of manufacture. General Motors' interests and energies are concentrated on speeding war production.

PERFORMANCE



THROUGH BATTLE TESTS WITH FLYING COLORS—THE WORLD AROUND

General Motors' war products are now being used by both the Army and Navy on battlefronts all over the globe. Reports of their effectiveness—and, in many cases, of decided superiority over enemy equipment—are evidence of the quality materials and precision workmanship going into their manufacture. The great variety of equipment furnished is indicated below—and there are additional secret weapons which cannot be listed.

SUBCONTRACTING



THOUSANDS OF SUBCONTRACTORS AND SUPPLIERS ASSIST GENERAL MOTORS

Continuing peacetime practices, thousands of subcontractors and suppliers—companies which have demonstrated production efficiency and ability to maintain quality—have been utilized by General Motors. This practice has resulted in the spread of approximately one-half of General Motors' war work to outside firms. Thousands of these subcontractors and suppliers are firms employing 100 people or less.

★ ★ ★ THE ★ ★ ★
AMERICAN WAY
★ ★ ★ WILL WIN ★ ★ ★



★ ★ ★ BUY U.S. ★ ★ ★
WAR BONDS AND
★ ★ ★ STAMPS ★ ★ ★

Allison Airplane Engines • Tank Destroyers • Navy Grumman Fighter and Bomber Planes • Pratt & Whitney Airplane Engines • Army Trucks • Bearings for All Types of War Equipment • Diesel Engines for Tanks, Trucks, Ships, Locomotives and Auxiliary Uses • Anti-Aircraft Guns and Gun Mounts • Tanks • Cartridge Cases • Tank Guns and Gun Mounts • Military Locomotives • Bomber Parts and Subassemblies • Gun Control Equipment • Airplane Automatic Pilots • Anti-Tank Guns • Batteries and Wiring Equipment for Planes, Tanks and Trucks • Shot and Shell • Ambulances • Bomb Parts • Carbines • Spark Plugs • Electrical

"KNOW-HOW"



ENGINEERING AND PRODUCTION KNOWLEDGE PRODUCES RESULTS

The experience gained by General Motors over the years has proved of immense value in war work. This "Know-How" in the fields of engineering and manufacture has made possible quick conversion to war production, and resulted in simplification of design, improvement of quality and reduction in cost. This not only speeded up the work and got the job done, but saved manpower and millions of dollars of the taxpayers' money.

EMPLOYMENT



EMPLOYMENT FIGURES HAVE MOUNTED TO AN ALL-TIME HIGH

Although more than 50,000 G.M. people have joined the armed forces, employment in the U. S. and Canada rose to 370,000 in 1942—an all-time high. This increase involved great problems in training personnel. Hours worked increased to an average of 45.5 hours per week, compared to 40.7 hours in 1941. General Motors' employment is spread through 107 plants in the U. S. in 46 communities in 13 states—and five plants in Canada.

SERVICE COOPERATION



TECHNICAL TRAINING AND FIELD SERVICE TO ASSIST THE ARMED FORCES

General Motors' training schools for technicians of the armed services have graduated more than 11,000 men—will train approximately 40,000 in 1943. Parts schedules have also been established, and maintenance units set up in combat areas. Technical observers are stationed at battlefronts, so that our engineers and mechanics, cooperating with the armed forces, can more rapidly improve the military effectiveness of weapons.

WAGES



WAGES REACH A NEW PEAK AS RATES AND HOURS INCREASE

Along with increased employment and working hours, wages have risen substantially. Hourly workers, who averaged \$43.41 weekly in 1941, averaged \$54.91 in 1942—an increase of 26%. The payroll for both salaried and hourly rate employees in 1942 was \$859,314,062. G.M. paid \$259,331 to employees for suggestions furthering the war effort. More than \$7,000,000 was paid to employees through group insurance.

REDUCED COSTS



SAVING MILLIONS OF DOLLARS FOR UNCLE SAM—AND YOU

As a result of the industrial "Know-How" reviewed above, manufacturing costs were so reduced that, by the end of 1942, more than \$177,000,000 had been voluntarily returned to the government in price reductions, and there will be an additional \$183,000,000 in price reductions which will apply to subsequent deliveries under existing contracts.

PROFITS



GENERAL MOTORS' PROFITS WERE LOWER IN 1942

The General Motors policy of limiting its rate of profits, before taxes, on its manufacturing business to about half of 1941 resulted in a net income from manufacturing of 4 1/2% of total sales. Common stock dividends were \$2 per share in 1942, as compared with \$3.75 per share in 1941.

GENERAL MOTORS

"Victory is Our Business!"

Equipment for Airplanes, Ships, Tanks and Trucks • Machine Guns • Radio Receivers and Transmitters • Airplane Propellers • Naval Gun Housings • Parachute Flares and Flare Projectors • Aircraft Cannon • Gun Motor Carriages • Truck and Tank Engines • Helmet Liners • Instrument Panels for Tanks and Trucks • Machine Tools • Airplane Landing Gear Struts, Hydraulic Controls, Fuel Pumps and Other Equipment • Tank Tracks • Aluminum Engine Castings and Forgings • Tank and Truck Transmissions • Armasteel Castings for Tanks, Trucks and Guns • Military Vehicles • Aerial Torpedoes • And Many Other Products



Victory Production Money — Not Rationed!

Money is the "sinews of war." It is one of the unrationed necessities for concerns engaged in producing military equipment and supplies.

We put no ceiling on the amount of capital we can make available for commercial financing, if it can help victory production.

There are probably many concerns that could qualify for government contracts . . . but they haven't sufficient financing to guarantee fulfillment.

There are probably many companies which could increase production on current orders . . . if they had more working capital to meet larger pay rolls, buy more raw materials or add to plant equipment.

In many ways, Commercial Credit financing can help companies which are producing for military and essential civilian needs . . . don't let any routine limitations imposed by your present financing connections retard your effort.

If you have the manufacturing and sales potentials, we can engineer a plan of financing and supply the funds you need on terms that will enable you to utilize them profitably.

In confidence, and without any obligation, we will analyze your problems and work out a practical solution. Just give us the opportunity to prove it.

Commercial Credit Company **Baltimore**

Subsidiaries: New York Chicago San Francisco Los Angeles Portland, Ore.

CAPITAL AND SURPLUS MORE THAN \$65,000,000

Interesting color charts of ARMY, NAVY and MARINE insignia free on request.

powder gives the bedbug the old heave-ho, too.

Every one knows of the miracles wrought by the sulfa drugs. In the First War approximately 80 per cent of perforated abdominal wounds proved fatal, and yet the American surgeons were certainly as good as the best and were actually better in some things. In the Honolulu attack virtually all the wounded to survive shock to undergo operative treatment with sulfa recovered. The soldiers are now immunized in advance against tetanus. No gas gangrene has been reported, so far as known to this reporter; but, in the First War, gas gangrene was the most dreaded of all the complications which followed wounds. Typhoid fever has been practically eradicated from the military establishment, along with smallpox, thanks to inoculation. New and more potent vaccines have been discovered. The fight against hookworm, beri-beri, sleeping sickness in horses and rinderpest in water buffalo, and the chlorination of water, rests largely on the foundations set up by the Army's medical men.

Army keeps its place

THE ARMY'S health could be better than it is, of course, even if it is better than the health of any other army in the world. Under the May Act, the Army could clean up the civilian areas surrounding or bordering on army camps.

If the lickie shacks, the red light districts and the chuck-a-luck houses could be burned out and kept burned out, then 40 men in each white 1,000 would not appear at sick call with some form of venereal disease. The percentage runs higher in the colored units. Yet there is less V.D. in the American Army than in any other. The men are controlled more rigidly and cured more rapidly.

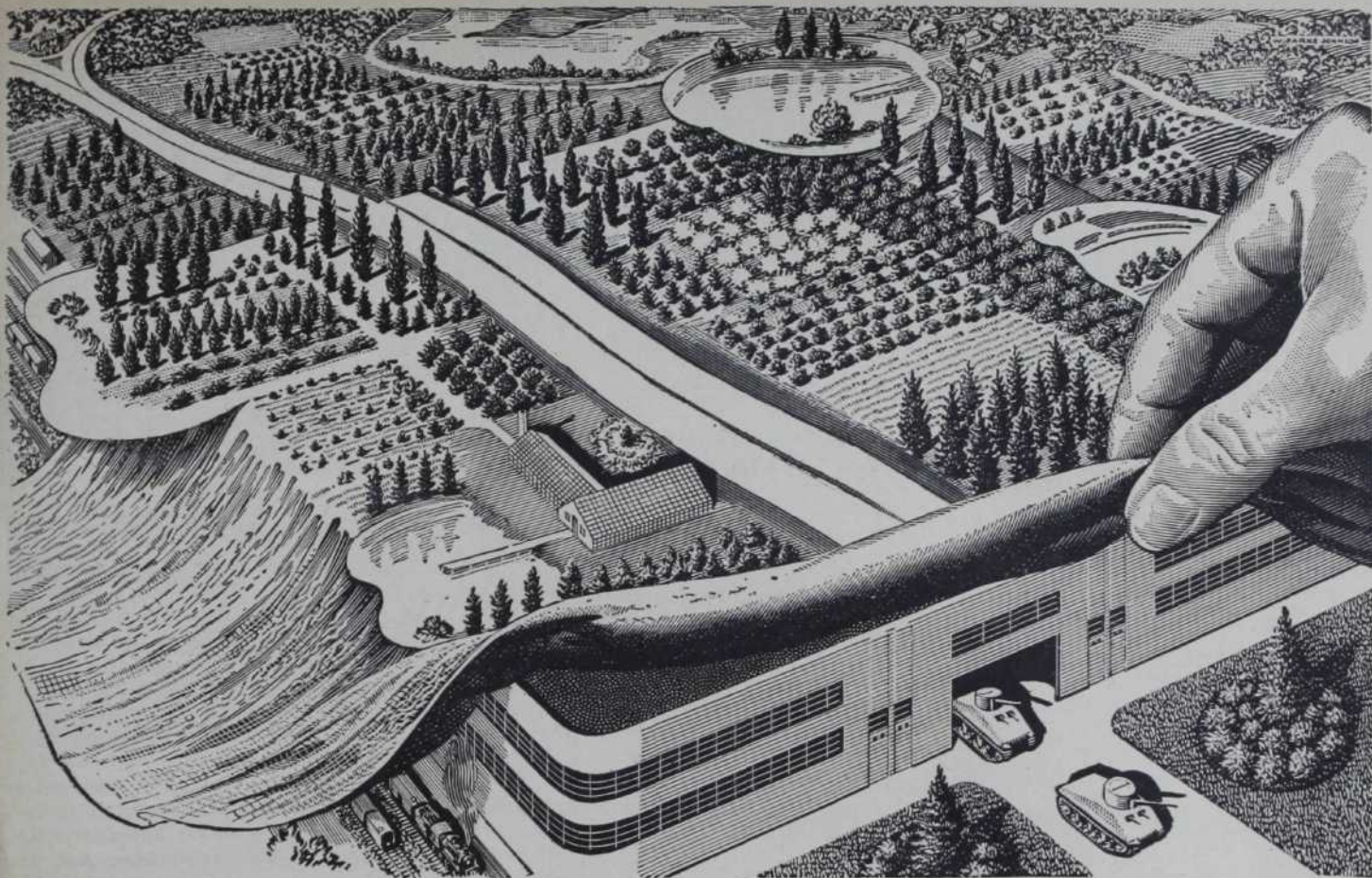
The percentage of V.D. is lower than among men of the same age in civil life.

Of course it is too high. One case in 1,000 would be too many.

"The Army does not interfere with the government of civilian areas."

There is a good reason for that, if you stop to think it out. The moment the commanding officer of an encampment slapped a grafting sheriff in the guardhouse or cleaned up an area by any other means than the time honored one of declaring a town or an establishment "out of bounds" an outcry would be heard from Tammany Hall to the Big Bend. Or might be heard. Soldiers cannot wisely interfere with civil rights and the soldiers know it. A good C.O. can protect his men and discourage the sellers of flesh and rotgut and always does. The Commanding Officer who falls short in his duty is caught up with sooner or later.

If his top sergeants are good, the catching up with will be postponed a long time.



HIDDEN from HOSTILE EYES

America's war plants are possible targets for bombing raids. They must be hidden from hostile eyes, and from ingenious photographic films which strip the deception from synthetic camouflage. Skillful landscaping and real trees must be employed, to give natural concealment.

Thus, an eastern tree nursery not long ago received an order for thousands of evergreens and hardwoods. Today, those transplanted nurseries help to hide factories vital to the war effort. But first, trucks had to be provided, to ship the trees—

miles of burlap to pack the roots—cranes to lift trees weighing tons.

Time is vital in supplying credit to meet such war demands. The local bank was consulted. That bank in turn talked with The Chase, its correspondent in New York. A loan was quickly arranged by the two banks, to cover the cost of moving whole forests a hundred miles to safeguard war production. Credit supplied by American commercial banks is helping in hundreds of similar ways to deliver fighting machines to fighting men the world over.

THE CHASE NATIONAL BANK

OF THE CITY OF NEW YORK

Member Federal Deposit Insurance Corporation

Polly has Two Dates a day!



She has a date with a time clock, and she doesn't "break" it. Polly, and millions like her, are backing up Victory with eight full hours of hard work every day.



She also has a date with the bus or trolley that takes her to and from her job. This, too, is a date that isn't broken, thanks to the way America's transit companies have undertaken the task of moving workers between their homes and jobs.

Serving both urban and interurban transit companies are thousands of Ohmer Fare Registers. They speed the collection of fares, produce a permanent printed record of the receipts, provide data on loads and trips and other vital facts required by both management and government. Thus, they increase the speed and efficiency with which overburdened transit companies can handle our working millions.

Full information regarding the Ohmer Fare Registers still available within the limitations of war-time restrictions will be furnished upon inquiry. Ohmer Register Company, Dayton, Ohio.

OHMER

CASH REGISTERS for every type of retail store
FARE REGISTERS and TAXIMETERS for transportation
TOOL CONTROL REGISTER SYSTEMS for industry



Teamwork...

BIG and little business clasp hands to make possible the swift military victories

LITTLE by little, as the full story of America's tremendous war job becomes known, the American people get an insight into the grandest example of industrial teamwork—between "big" and "little" business—ever exhibited.

This teamwork was demonstrated recently when the American Locomotive Company celebrated the anniversary of

the completion of the first M-7 "tank killer," pioneered and produced first by the company's tank arsenal in Schenectady. The company has 22,000 employees, but it sent out 500 other invitations to "men closely associated with constructing the M-7." Those other men were the subcontractors.

At the celebration, attended by officers of the British Eighth Army and of the U. S. Armed Forces in North Africa, Duncan W. Frazier, president of American Locomotive, had ample words of praise for his employees and for Schenectady citizens generally. Then he added:

"I take this opportunity to speak for the thousands of men and women—in garages, machine shops and small manufacturing plants up and down this historic valley and in towns and cities far from here, without whose help we could not have done our part of the job.

"This is as fine an example of Democracy at work as anyone could wish. Let any who think well of totalitarian systems examine the magnificent, cooperative job which eager, free men and women are doing in this country—here in Schenectady and in many other places. Let any who feel that big business and little business are not working hand-in-glove for love of country study what is going on in America today.

"The majority of our subcontractors and suppliers are small shops—many of

BELL RINGER



Welded Scrap Message To Hitler

A novel sign, entirely arc-welded from scrap steel, has been placed in the front window of The Lincoln Electric Company's offices at Kansas City to encourage scrap collection and it has been viewed by thousands of passersby. The message was arc-welded on the scrap steel plate from scrap stub ends of electrode. E. D. Anderson, district manager, devised it.

them with five to 15 workers and most of them with less than 200. One small company, with only six men, has been making one of the most important parts of the M-7. Another company with only seven men makes five separate parts for the tank-killer."

Cooperation with subcontractors did not end at dark. Many a time, American Locomotive's production department ran into a midnight problem and called a subcontractor out of his bed. Often that subcontractor would call his whole organization back to work at one o'clock in the morning.

The post-war implications of this close cooperation have not been overlooked. Mr. Fraser said:

"This widespread cooperation may have important post-war results. Hundreds of small shops and manufacturers are getting a technical education—learning how to handle new metals, new techniques, how to read blueprints, how to use new machines and a hundred other manufacturing arts. This country after the war will have a vast new army of trained machinists and manufacturers—men whose experience was limited until expeditors and engineers went out from companies like American Locomotive to help them learn the modern method of doing things."

He pointed out also that many "little manufacturers" have become "big manufacturers" through the war.

The result of this teamwork by big and little business was noted at the Schenectady celebration by Maj. Gen. Russell L. Maxwell, commander of the U. S. Armed Forces in the Middle East.

"The M-7's arrived at the crucial moment—just before the battle of El Alamein. In all my experience, I have never encountered the degree of gratitude that came our way from the British forces when they tried out the new M-7 'tank killer.'"

A Week with OWI

WHILE we guarantee beforehand that you won't do it twice voluntarily, we recommend heartily that you get on the mailing list of the Office of War Information for just one week and wade through every bit of the voluminous output that will come your way.

It is no wonder that Elmer Davis has frequently had to tell Congress that he had not had time to read disputed OWI material before it was released.

Unless you love punishment, before the week is up, you will resolve never again to let your name get on OWI's long list. In addition, you will:

1. Have several pounds of waste paper on hand, and a general idea of why there is a paper shortage among private users.

2. Get a faint conception of how big a big government has been developed, if its news arm has to be so active.

3. Become so well informed about what's really happening in Government that your best friend won't trust you.

Take the week of April 26-May 3 as typical. During that week, we received

...A MINUTE'S CARE IN ADDRESSING MAY SAVE DAYS IN DELIVERY!

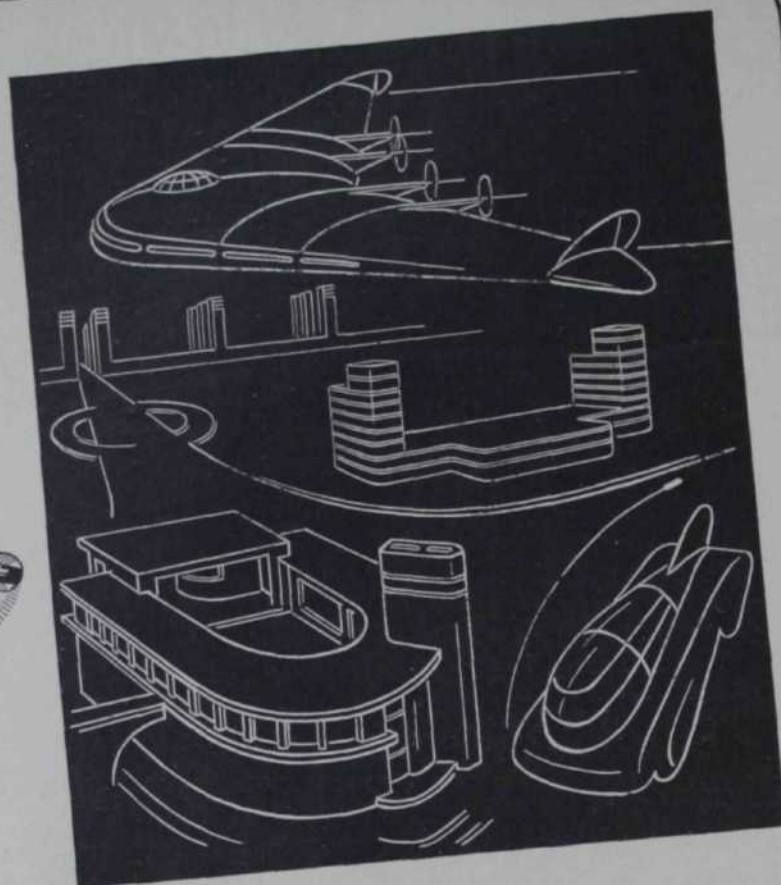
A war-time shipping suggestion: Prepare your shipments carefully—pack them securely—print the address clearly—and when possible ship them in the early hours of the day. Thus, you will help to speed up handling and delivery.

FROM SALLY SMITH
654 4th Avenue
New York, N.Y.

TO MISS MURIEL ERICSON
24 CLOVEN ROAD
DENVER
COLORADO

**RAILWAY
EXPRESS
AGENCY**

NATION-WIDE RAIL-AIR SERVICE



AFTER THE WAR... **WHAT?**

WHEN the final blow of this war has been struck and Victory won, American Industry will turn to the manufacture of amazing new Homes, Planes, Automobiles, Radio and Television sets, Refrigerators, Washing Machines and thousands of other peacetime marvels which to Americans are not luxuries but necessities of everyday life.

When that BETTER DAY comes, industrialists will find in North Carolina those factors which make for the most efficient and profitable operation. North Carolina offers special advantages to those interested in mineral, chemical, plastic, woodworking and plywood, textiles, food processing and ceramic fields.

Here, workers are 99% native-born... willing, efficient, intelligent, coop-

erative. The supply is ample.

Raw material resources are vast. Hydro-electric power is plentiful.

North Carolina's strategic location—outside the congested areas, yet close to major centers—affords economical production plus efficient distribution. Production costs are further reduced by the year-round mild climate. Living conditions are ideal: Healthful climate... abundant outdoor recreational facilities.

North Carolina is in a sound financial position. The tax structure appeals to all types of business men. North Carolina invites postwar industrial planners to write today for specific information, engineered to your field. Address, Commerce and Industry Division, 3114 Department of Conservation and Development, Raleigh, North Carolina.

NORTH CAROLINA

from OWI three copies of a 20-page pamphlet designed to report on war-time problems in Baltimore.

In the same week, we were sent a copy of a long letter from Dr. James M. Landis, director of the OCD, to Robert A. Lovett, Assistant Secretary of War for Air. It praised the Civil Air Patrol in 300 well chosen words, although why Mr. Lovett has to read the praises of the Civil Air Patrol now that it is in his charge is rather unclear in our minds.

From another long OWI release, we learned that no less than 15 separate publications (for free!) regarding absenteeism have been prepared by no less than five Government agencies.

But these are just sidelights. The great bulk of the material that came in the course of the week was about important and essential things, such as the long release from Secretary Ickes' office on how to store up coal as a hedge against possible transportation shortages (this one came the day the mine strike threatened) . . . "Dates With Your Government," a list of deadlines on rationing sent out by OPA . . . "Some Revealing Facts Showing The Great Differences Between This War And The Last One," an attempt at history-writing by OWI . . . another long release from Dr. Landis about CAP . . . changing conditions in the talc industry . . . an item about Negroes in shipyards . . . another item carrying the news that Prentiss M. Brown is checking prices in coal towns . . . another carrying the news that shrimp production is off 20 per cent . . . two pages telling us that 32 Chinese engineers have arrived, at expense of the Board of Economic Warfare, to learn American production secrets . . . another long piece telling us that baby scales production will be lower in 1943 than in 1941, etc., etc., etc.

There was a day when we might have railed at such an enormous output from one Government agency, but this is war and production must top all former records.

Certainly no one can say that OWI is not doing its share.

Seadromes in 1929

PUBLICITY on the "Seadrome Route to Europe" last month aroused more than passing interest in the Editorial Department of this great monthly. A sense of familiarity with the project caused us to turn to old files—and there we found the answer.

Fourteen years ago, in July, 1929, to be exact, NATION'S BUSINESS published "What's Next in Ocean Travel." It was an extended preview of today's transatlantic project—dimensions and all. But there is one notable difference in the project envisioned today as compared with 14 years ago.

Today's plan calls for three seadromes enroute to Europe as against a series of eight 'dromes in the 1929 program—thus marking the progress of aviation. A few more years and it is our guess that one or more of these may disappear.

FOUND:

THOUSANDS OF TONS OF BRASS!

IN one of Buick's busy plants, large calibre shell cases are now being built of *steel* instead of hard-to-get *brass*.

Coming from the line by the thousands, these cases mean an important saving in a highly critical material.

But, you may ask, doesn't this simply mean that our already-burdened steel-producing facilities have to turn out just that much more steel?

The answer is — not at all! Through careful redesign and development of new methods on other of our war jobs, Buick has effected important savings in steel too.

These are more than enough to offset a load on the steel

mills that might have been involved in this switch from one material to another.

It is very much like finding several million pounds of brass every year — not by accident, but in reward for a patient, careful process that goes on constantly in Buick plants.

We're *always* looking for ways to save materials of any kind. Even a fraction of a pound per piece produced is not too little to get our prompt attention.

Such care pays, as this instance proves. It makes all materials stretch — and there is no better way of making sure our fighting men get plenty of what they need to win.



war goods
**WHEN BETTER AUTOMOBILES ARE BUILT
BUICK WILL BUILD THEM**



BETTER BUY BONDS
*Let your dollars
lend a hand*

BUICK DIVISION OF **GENERAL MOTORS**

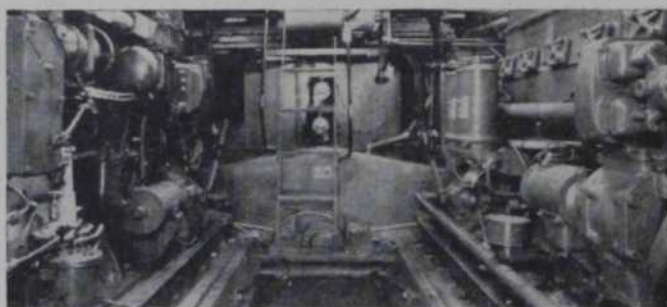
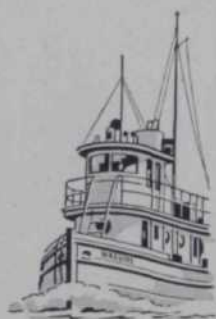
To Help You

Our "Modified" policies have adjusted premium arrangements which often will remove any necessity for risking a postponement of adequate life insurance.

**A Prudential agent
will be glad
to explain them**



The Prudential
Insurance Company of America
Home Office, NEWARK, N. J.



MORSE SAVES HERE

CONVERTED from steam to Diesel Engine propulsion with the use of Morse Marine Dual Drive Transmission, the Tug Maguire is in twenty-four hour service, seven days a week. Records show a reduction of 50% in operating cost with greatly increased pulling power. Drives of this type are rapidly being installed in other ships for war

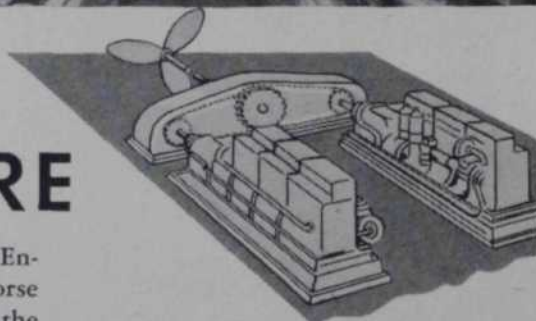


Illustration above shows simple parallel arrangement of two Buda Diesel Engines connected to propeller shaft with Morse Marine Chain Transmission.

work. Morse engineers are continually meeting tough power transmission problems. They are ready to help you.

SILENT CHAINS

ROLLER CHAINS

FLEXIBLE COUPLINGS

CLUTCHES

MORSE positive DRIVES

MORSE CHAIN COMPANY

ITHACA, N. Y.

DETROIT, MICH.

DIVISION BORG-WARNER CORP.



Two Masters . . .

ONE is the nation and one is the search for truth

DOWN in the basement of the administration building of the Smithsonian Institution in Washington, D. C., where tourists seldom go, is the International Exchanges office. There, despite the war, the finest of our scientific and literary publications are being saved for delivery to Japan, Germany and Italy the day peace is made. Last year, it cost \$45,000 to obtain and store this material (sent from research institutions and universities all over the country) for our enemies, who will one day be our friends again. If the experience of other wars holds good, the Axis nations are doing the same for us.

In World War I, Germany, Austria-Hungary and Turkey saved for us the finest of their scientific literature and shipped it over as promptly as possible after the Armistice.

Scientists who are doing everything in their power to help America lick the Axis see nothing remarkable in this procedure.

"It's just that all true scientists have two masters," one remarked. "One master is his native land. The other is his desire to spread scientific knowledge so that all can be helped by it."

During the Civil War, the Spanish-American War and World War I, just as today, the International Exchanges office continued to do business as usual, so far as possible, with the nation's enemies. The office was formed under a plan adopted by the Smithsonian's Board of Regents December 8, 1847, upon the recommendation of the first secretary, Prof. Joseph Henry, and has expanded its services under his successors—Prof. Spencer Fullerton Baird, Samuel Pierpont Langley, Dr. Charles Doolittle Walcott and Dr. Charles Greeley Abbot.

As a matter of fact, establishment of the International Exchanges was one of the first tangible means the Institution employed to carry out the wishes of its founder, James Smithson, an English scientist who, on his death in Genoa in 1829, left his entire estate to the United States "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men."

Frank E. Gass, present head of the exchange office, has served at the Smithsonian for almost 57 years in capacities ranging from office boy up. He remembers World War I "as if it were yester-



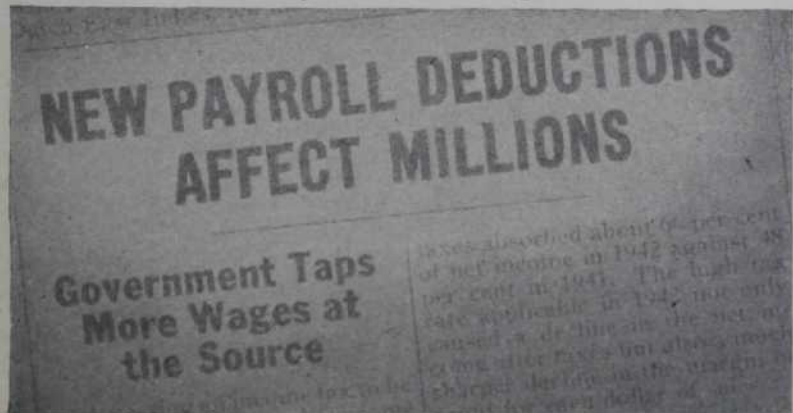
New accounting machines can be purchased in some cases under War Production Board Regulations. Also, in many organizations, we have been able to help solve their accounting problems without the purchase of new equipment. Increased capacity frequently results from mere revision of the system.



Every new man taken on means more work for the Payroll Department. Every instance of overtime means more entries on the payroll records. And every rise in the rate of labor turnover makes the going tougher.



Just when demands upon the Department are heaviest, competent workers leave and are hard to replace. New workers are more easily trained where mechanical equipment has been in use for some time. Which also means that the experienced worker sacrifices less productive time acting as instructor.



1943 is the Payroll Department's toughest year. On top of all its other burdens there's the added work involved in Victory Tax deductions.

A VICTORY

on the Production Front
that was won

BEFORE THE WAR!

☆ ☆ ☆

For its tremendous wartime expansion, American industry has had to fight . . . and fight hard. And in no sector of the home front has the pressure been greater than in the Payroll Department.

It has had many more workers to pay, more deductions to make from every payment, and one problem after another in maintaining an efficient staff.

But wherever there had been peace-time installations of *mechanical* methods, the Department was able to triumph over these wartime conditions.

In thousands of war plants Underwood Elliott Fisher Sundstrand Payroll Machines have enabled accounting procedure to keep pace with mounting production.

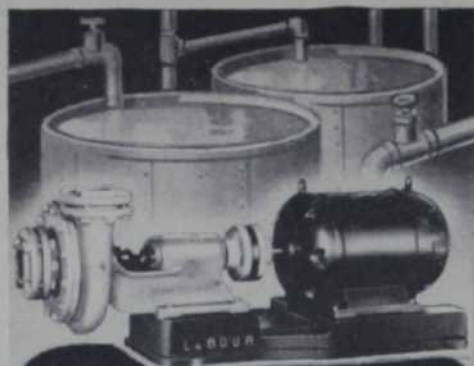
Many a company has taken advantage of our knowledge and experience by having us revise its system so as to handle the increased volume.

And large numbers have seen the value of signing up on a yearly basis for the expert care provided by Underwood Maintenance Service. Our Maintenance Service from coast to coast is being kept in complete and efficient operation.

Spare parts, too—we are providing for all your Underwood, Sundstrand and Elliott Fisher machines—as well as a complete line of carbon paper and ribbons, unsurpassed in quality, for every make of office machine. Underwood Elliott Fisher Company, One Park Avenue, New York, New York.

**Underwood Elliott Fisher
Sundstrand
PAYROLL MACHINES**

★ We are now in war production on—U. S. Carbines Caliber .30M1—Airplane Instruments—Gun Parts—Ammunition Components—Fuses—Primers and Miscellaneous Items.



Moving Liquids in Industry

If yours is one of the many plants now beginning to employ acids, caustics, or other difficult-to-handle liquids in substantial quantities . . . follow the lead of the makers of those chemicals and use LaBour Pumps for unloading tank cars, transferring within the plant, filtering, evaporating, and other purposes.

The chemical industries have known and respected LaBour Pumps for more than twenty years. Corrosion- and abrasive-resistant pumps, self-priming and non-priming, for all but highly viscous liquids at any practical temperatures, are part of the LaBour line. Capacities range upward from 10 gallons per minute.

We'll be glad to answer your questions, and furnish full details about LaBour Pumps—all without obligation to you.

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Filter CIGARETTE HOLDER

Eliminates major part of nicotine and tars—by official laboratory test

*Reg. U. S. Pat. Off.

USE ANY CIGARETTE IN HOLDER AS FILTER

BEFORE
AFTER
after smoking
20-30 cigarettes

\$1

"SMOKE ALL YOU LIKE —like all you smoke"
AT ALL GOOD STORES L & H Stern, Inc., B'klyn, N. Y.

day—or the day before," but has learned to take wars in his stride. He knows, he says, that this war will "blow over" just like all the rest. Meanwhile the "storage problem" in the International Exchanges office has become terrific. The amount of material sent in has not diminished since Pearl Harbor, although half the world has become isolated from the other half, and hundreds of square feet of floor space are now devoted to scientific and literary documents.

However, Mr. Gass has other puzzles. For example, he wonders if the Germans will be piqued when they learn that we have quit saving for them copies of all patents pending in our Patent Office. We published and saved all the patents during World War I.

Now, however, the Patent Office has stopped printing patents (or, at least, has stopped sending copies to the International Exchanges) and Mr. Gass believes the Germans will have a bad time trying to fill in the resulting vacuum in their libraries when peace comes.

Publications sent and received through International Exchanges are classified as (1) Parliamentary documents; (2)

Departmental documents; and (3) miscellaneous scientific and literary publications. Copies of the *Congressional Record* are being stored for future shipment to Germany, Japan and Italy.

Although documents actually were shipped into the South during the Civil War; into Spain during the Spanish-American War and attempts were made to run the British blockade during World War I to replenish German libraries, the International Exchanges is following a different policy in this war.

The last shipment sent to Germany left America in August, 1939, but was stopped by the British and sent back. Today the office manages every once in a while to get a shipment through to Russia or New Zealand or Australia, and Mr. Gass was slightly surprised and not a little pleased recently to learn that New Zealand wanted a shipment of his booklets in spite of the tight shipping situation between here and there. He was also one of the first persons to be informed officially by the Soviet Embassy that the siege of Leningrad had been lifted and would he please send along his shipment of documents to the Academy of Sciences there?

BELLRINGER



Still Fighting

Industrialists are turning increasingly to ex-service men of World War II to improve plant morale. Typical of these returned warriors who inspire their fellows to higher war production is Madison R. Hooven, who, after fighting on the front lines, is once more working in the Philadelphia plant of the Edward G. Budd Manufacturing Company. Enlisting in the Navy immediately after Pearl Harbor, he saw action in the southwest Pacific as a petty officer, first class, before he was wounded and honorably discharged. Although partially disabled, he went back to work, fired with determination to make life easier for his buddies—and his son, who enlisted in the Navy shortly after Mr. Hooven returned home. He says: "My fighting days may be over, but my working days for victory are just beginning."



WESTINGHOUSE ENGINEERING SERVICE

A nationwide corps of engineers offers you electrical and production experience gained through years of working with your industry.

In addition to engineering help on specific industry problems involving electrical power, these men can give you assistance on these other vitally important activities:

Product development: engineering of equipment to meet war requirements.

Maintenance: help in making existing equipment serve better, last longer.

Rehabilitation: redesigning and rebuilding obsolete equipment for useful service.

Material substitution: adapting available replacements for critical materials.

W.E.S. is available to *all* industries. Put it to use today on your production problems.



mountain-moving giant

gets a feather touch

It takes mountains of coal to stoke the furnaces under a great nation's war effort. Today, the largest dragline ever built is uncovering literally acres of badly needed coal. Weighing 2,400,000 pounds, its 185-foot boom can reach out half the length of a city block. With each trip of the giant scoop, a half carload of earth is stripped away.

With conventional control, the giant's 1400 horsepower muscle would put undue strain on the machine. But engineers of the dragline manufacturer, the operating company and Westinghouse teamed up on the problem. Together, they adapted a method of control that had never before been used for this purpose.

Rototrol, the Westinghouse development that provides smooth starting and stopping for the high-

speed elevators at Radio City, was applied as a control for the giant dragline. It proved that it could handle the enormous surges of power, the complexity of motions, the need for rapid acceleration and deceleration. It limits regenerative current peaks, minimizes mechanical shock and stress.

There you have an example of Westinghouse Engineering Service in action. It's a co-operative effort... a pooling of skills and techniques.

Can that kind of teamwork increase your production or cut your manufacturing costs? The nearest Westinghouse office is a W.E.S. headquarters. Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.

J-91005

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PLANTS IN 25 CITIES . . . OFFICES EVERYWHERE

FOR COST ADJUSTMENTS ON CONTRACT CANCELLATIONS

FOR POST-WAR PLANNING

FOR CONTRACT RENEGOTIATIONS

The Fact-Power of KARDEX

SUPPLIES NECESSARY COST ANALYSIS DATA

FOR COST INCENTIVE PLANS

FOR O. P. A. REGULATIONS

FOR FIGURING PRICES ON NEW CONTRACTS

● More and more . . . alert war-time executives are benefiting from the "fact-power" of Kardex Cost Analysis Controls. These simplified summary records provide management with highly important cost data, so vitally necessary under present-day conditions.

And Kardex continues to supply countless war manufacturers with graphic "fact-power" control of costs . . . helping them to deal successfully with contract renegotiation proceedings . . . or assuring accurate cost for adjustments on contract cancellations. There are other reasons why complete and efficient cost records are needed: They're a "must" to present cost data under OPA Maximum Price Regulations, for accurately estimating new prime and sub-contracts, for comparing efficiency under

proposed "incentive" plans, and for setting standards in connection with effective post-war production plans.

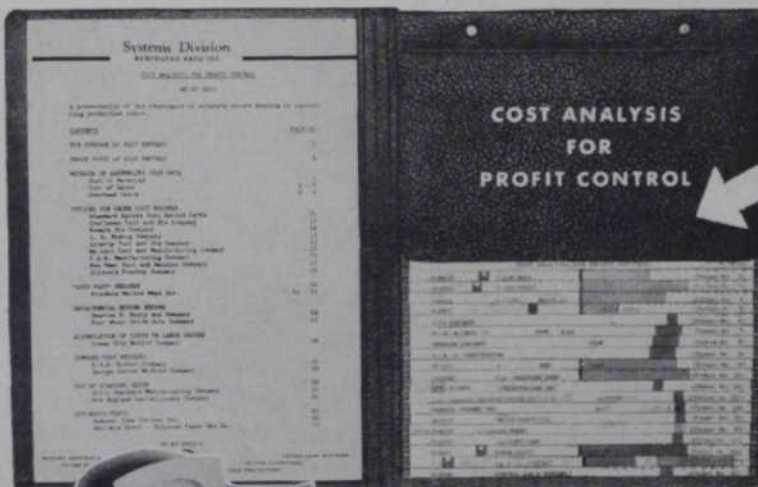
To provide management executives with latest developments in cost accounting systems and procedures, Remington Rand has just prepared an elaborate new portfolio, "Cost Analysis for Profit Control." It contains representative samples of twenty sets of visible Kardex forms, fully described; more than thirty additional loose leaf and machine posting systems; and eighty pages of analytical data on efficient systems used successfully by more than fifty concerns in a variety of operations.

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This Valuable
BOOK

Yours without obligation for a ten-day period. Write us at Buffalo, N. Y., or phone your local Remington Rand Systems Office.



SYSTEMS DIVISION
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Unfair?



RENT control has kept rents down in the face of rising costs but is hard on the property owner and the taxpayer

RENT CONTROL has resulted in more controversy than perhaps any other program of price fixing attempted by OPA.

OPA reports that, in the first 11 months of its administration of the rent control law, it received 420,000 complaints and appeals from landlords and tenants—38,000 a month.

Rent has advanced less since Pearl Harbor than other items of living cost.

From January, 1941, to January, 1943: the price of food rose 36 per cent; clothing, 25 per cent; household furnishings, 23.6 per cent. But, in that same period, rent went up only 2.9 per cent.

"The administration of rent control," says Price Administrator Prentiss M. Brown, "has been one of our most successful programs in the battle against inflation."

Landlords complain

LANDLORDS, however, feel that rent control, as carried out by OPA, has been too one-sided. The tenant is protected, they say, but the landlord receives no consideration.

Rents in most defense rental areas were fixed as of March 1, 1942, although in some areas the date was "rolled back" to as early as January 1, 1941.

Since rents were frozen, maintenance costs on rental property have increased as much as 30 per cent, landlords point out.

In some communities, the Government has taken over a big volume of property since the start of the war, removing it from the local tax rolls, and thus placing a heavier tax burden on the landlord.

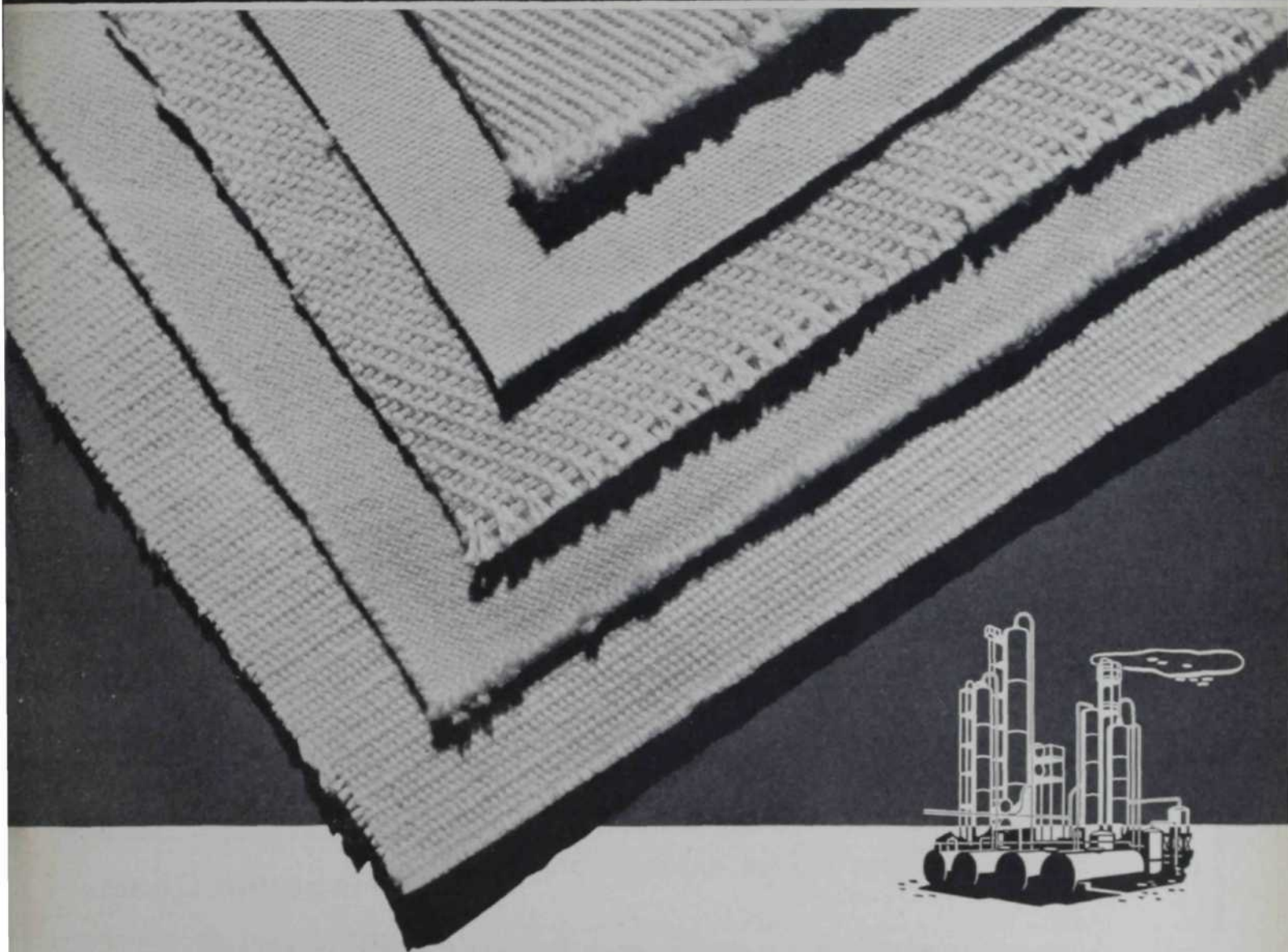
At the time the rent was frozen, the property may have been rented to a tenant on relief who was paying a bare minimum rent. No matter. The rent is still frozen at that level.

If the landlord should raise the rent, the tenant—under the law—can sue for damages. Here is an example of how that works:

In Rockford, Ill., a clerk, Howard G. Whiteside, had been living at the Rosalind Hotel since before March 1, 1942.

When he first took the room, the hotel, as a "courtesy" (so the hotel said)

There Are "Styles" In Industrial Fabrics, Too



HOOPERWOOD "Canvas Engineering" is solving processing problems in many industries.

While not as spectacular as the fire-, water-, weather- and mildew-resistant HOOPERWOOD Duck which offers protection to men, equipment and supplies on far-flung battle fronts—these "home front fabrics" are helping to produce many of the vital materials of war and the peace to follow.

For instance, HOOPERWOOD Filter Cloth and Blankets are made in almost countless variations of cloth construction to meet the exact filtering requirements of each individual processing operation. They are widely used for animal, vegetable and mineral oils, ceramics, drugs,

chemicals, extracts, dyes, paints, pottery, sugars, soaps, etc.

In many cases, HOOPERWOOD Special Finishes speed filtering operations and cut costs, provide longer filter cloth life by protecting it against mildew and caustic deterioration.

Yes—from the seats of "jeeps" to the miles of Cotton Dryer Felts in mammoth paper mills, you will find HOOPERWOOD "Engineered Fabrics" serving the purpose better and more economically.

WM. E. HOOPER & SONS CO.

New York PHILADELPHIA Chicago
Mills: WOODBERRY, BALTIMORE, MD.

Since 1800 (through six wars) the HOOPER name has symbolized highest quality in Cotton Duck and other Heavy Cotton Fabrics, Paper Mill Dryer Felts, Filter Cloth, Rope and Sash Cord

HOOPERWOOD COTTON DUCK

charged him \$5 a week for a room "which normally would command \$7.50 a week."

Some time after March 1, 1942, the hotel raised Mr. Whiteside's rent to \$6 a week. Mr. Whiteside sued.

The jury awarded Mr. Whiteside damages of \$450—\$50 for each of nine weeks he claimed he was overcharged a dollar a week.

Under the rent control set-up, the country is divided into 458 rental areas. By May 1 of this year, 371 of the areas were operating, each with its own regional director, a paid staff and a local rent control office.

Decisions are made in accordance with written regulations from Washington.

If a property owner or a tenant wants to appeal a decision beyond OPA, it is his privilege to do so—but the hard way: The Chief Justice of the Supreme Court of the United States has appointed a special tribunal of three justices to hear such cases.

Recently the National Association of Real Estate Boards made four recommendations to OPA for improvement in the rent control system. All four recommendations were turned down.

"To do what you ask us to do," OPA told the association, "would be in conflict with the President's 'hold-the-line' order against inflation."

Here is the story of the association's four recommendations:

1. Home Ownership—To cut down on possible evictions, OPA requires a one-

third down payment on the purchase of a home, and a 90 day stay before the purchaser can take possession.

This arbitrary ruling works two hardships on real estate, say the realtors:

1. It keeps property in crowded areas off the rental market, because the owner knows that once he rents his property, it will be virtually impossible for him to sell; and
2. It raises a barrier to home ownership among the lower-income groups.

The association recommended that OPA adopt the same standards as are accepted by the Federal Housing Administration: a ten per cent down payment on homes under \$6,000, and 20 per cent on homes above that price; and allow possession on the first day of the second month after the sale is made.

OPA said, NO. "We must allay the fear of eviction of war workers and servicemen's families, that they may be able to keep on the job."

2. Local Rent Committees—The association recommended that OPA authorize voluntary local rent committees made up of representative citizens, and with advisory and appellate powers, to work with regional rent officials.

The functioning of such committees would cut down on the great number of cases now referred to Washington. Also, the taxpayer would save money now being paid out in regional rent control offices for salaries—for instance, \$42,000 in Winneago County, Wis.;

\$22,000 in Beloit, Wis.—and so on throughout 371 areas.

OPA said, NO. "Rent control involves substantive property rights, and these can be safeguarded only by trained personnel clothed with authority, devoting themselves full time to the job and working within a framework of law."

3. Costs—The National Association of Real Estate Boards suggested that OPA adopt a more realistic attitude in computing costs—"recognize the need for a fair and equitable relationship between rents and other controlled prices."

OPA said, NO. "Landlords generally are in a better operating position today than they were before the impact of rental activities upon the rental market."

4. Administrative Attitude—The association recommended that, for the successful operation of a sound rental control system, "A broader attitude in the fair administration of the law by OPA is necessary."

As it now is, the association told OPA, the property owner must fill out too many forms, "merely to carry out a preconceived idea that ironclad rules must be established to protect the tenant."

OPA said in reply: "The administration of rent control has been one of our most successful battles against inflation. To alter its basic methods would be disastrous to our national effort. Acceptance of your proposals would result in widespread increase which, to wage-earners and salaried workers, mean substantial wage cuts."

So far, OPA has had the last word. But landlords still feel that, in the administering of the rent control law, the interest of the property owner should be protected as well as the interest of the tenant.

An Opportunity

for a MACHINERY MANUFACTURER or INVENTOR to play a profitable part in our post-war expansion program

For the past 30 years, we have maintained a position of leadership in the packaging machinery field. And when war came we were among the first to engage in the designing and building of armament machines. Starting with shell-loaders, we progressed to piercing and priming machines, cartridge clip loaders, linking machines for .50 cal. cartridges, etc. In addition, we have taken on the manufacture of gyroscopic compasses.

All of this has added greatly to our plant capacity and to the creative ability of our organization. Consequently, we are in an extremely favorable position to undertake an expanded post-war business.

Right now, we are working on ideas to improve and enlarge our regular line of wrapping machines when peace comes. *We are also planning to manufacture and sell other types of machines used by industries outside the packaging field.*

If you are a machinery manufacturer or inventor, this may present just the opportunity you are seeking.

● You may have ideas for new machinery which need development. We will be glad to discuss them with you, and if mutually satisfactory, will develop them with you.

● You may have a machine or machines which you have been making in your own plant, but which might be improved and made with greater profit in ours.

Final arrangements may result in your coming into our Company—or may be worked out on some other desirable basis.

If you feel that you have something on which we might work together, we suggest that you communicate with us, giving full particulars. We can then arrange for a meeting.

PACKAGE MACHINERY COMPANY, Springfield, Massachusetts

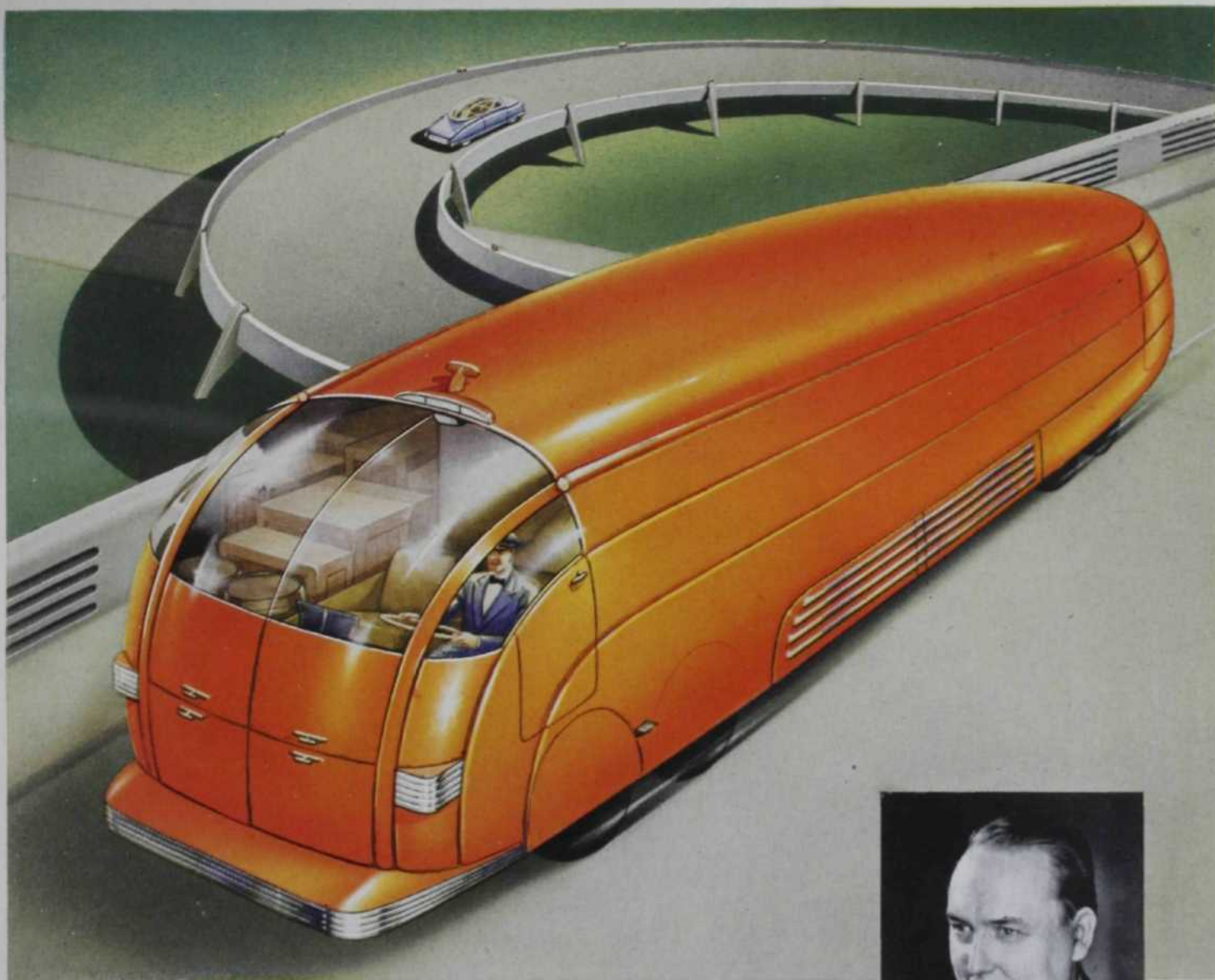
Over a quarter billion packages per day are wrapped on our machines

Forgotten Dams

A GAIN and again, the research bureaus are asked to test the popular attitude towards government ownership of public service. One poll-taker in an apartment house district of New York City recently found a majority in favor of such an arrangement. Half a dozen public school teachers on her list were enthusiastically for it.

But when, among the twoscore questions, there came one asking the respondent to name some of the power dams built by the Government, not two per cent of the generality could remember any other than the Boulder Dam, which name, for some reason, had stuck in the minds of several.

Even among the teachers, only two remembered the Boulder Dam and none other. The remaining four could name neither the Boulder nor any of the New Deal's big power projects, not even the Norris. But they were all firm in their belief that government operation of electric power has been a great and admonitory success somewhere!



Front as well as rear loading, better load distribution, tandem front driving axles, plastic windshields, periscope rear vision, are only a few of the possibilities for progress in transport after Victory, according to Lurelle Guild, noted New York industrial designer, creator of the "Truck of the Future" pictured above. Mr. Guild says American Motor Vehicle Manufacturers will show the way.



Super-Transport on Super-Highways

Today motor transportation progress is concentrated on the development of superior military vehicles—with specialized axles and brakes by Timken playing a leading role.

As for tomorrow, regardless of the size, shape or design of the trucks and buses produced by America's great manufacturers, axles must *carry* the load, *move* the load, *stop* the load. And Timken will be ready with improved axles and brakes that will do the job better and more economically in the long run.

Now, 'til Victory, take care of your trucks and buses! We'll help you—by furnishing complete Axle Maintenance aids, including the showing of a full-color sound film on "Teamwork" to your organization, on request.



For a better world tomorrow, buy War Savings Bonds today.



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AS TOUGH AS THEY COME!

Camps, air fields and supply roads for our armed forces are springing up, as if by magic, in all parts of the globe. Operating under conditions of the worst kind—shovels, bulldozers, trucks and other construction machines that do the heavy work must be brutally strong. Equipment parts that must defy terrific stresses and shock loads must be the toughest forgings procurable. Delivering on time, Kropp Forge devotes 168 hours a week to the production of forgings of every type for armaments and fighting machinery essential to the war effort. Maybe we can aid you with your forging requirements.

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KROPP



Proudly we fly the Army and Navy "E" flag and stars, awarded and re-awarded for excellence and proficiency in the production of war materiel.

Post-War Sword of Damocles

(Continued from page 28)

gloves; the fisherman in Canada used Army boots; while the colored man in the Carolina cotton fields made good use of a Navy jumper and the people in all walks of life wore the Army leather jerkin."

It took four months and 10,000 men to complete the first inventory of goods left over on Armistice Day and the listing was out of date by the time it was finished. New deliveries had increased some items. Spoilage had decreased others.

Policies changed from time to time. Markets were not always accurately gauged. Pressures were brought by consumers who wanted faster sales, and by producers who opposed them.

The Government had opposing pur-

Jaws of a Vise

IN THE post-war period private enterprise must face termination of contracts with huge sums due from Government. It must also face the possibility of a huge volume of government-owned surplus property. These factors, on the one hand, with excessive taxes and severe regulations of many taxes on the other hand, can place enterprise between the jaws of a vise. There must be no serious errors in these matters.

U. S. Senator WALTER F. GEORGE,
of Georgia,
Addressing the U. S. Chamber of
Commerce

poses, to avoid industrial disturbance and to realize proceeds for the Treasury.

Efforts were made first to reduce surpluses by transfers to other departments within the Government. Goods that could not be thus utilized were offered for sale abroad. Some went to Allies, on credit. Trucks abroad were sold abroad, but at prices that enabled purchasers to ship them back to the United States and sell them cheaper than competing trucks.

In the next step, the Government offered goods to the trade that normally handled them. Trade groups formed syndicates to handle machine tools, X-ray equipment, lumber and other items.

Agreements generally required that surpluses be fed slowly into the market to avoid disturbance to industry and employment.

Few of the consumer lines were absorbed in these steps. Next came the campaigns by which the Government tried to interest municipal governments, chambers of commerce and other public-spirited groups in selling consumer goods.

Such sales were slow and, as a last resort, the Army opened cash-and-carry stores in 26 cities, offering food, clothing, camping equipment, and a wide variety of other items at prices 25 per cent or more below the scale prevailing in normal channels for comparable goods.

The Army stores brought an upswing in public acceptance of the goods offered, and independent operators began opening stores in other communities. Within a few years, there were 5,000 of these, most of them operated under group ownership.

Thousands of independently owned Army and Navy stores, replacing depleted war stocks with work clothing, outdoor equipment and other goods similar to their original stocks, have remained in business ever since, reminders that war surplus can create new and lasting channels of trade.

But World War I methods will hardly fit World War II surpluses. Then the accumulation of supplies was distributed by men who learned as they proceeded.

The coming accumulation of supplies will be more than five times greater, and it will include not only product stockpiles that could upset the peace-time economy, but raw materials that could be used to control it.

For example, if the Government has 500,000,000 pounds of copper on hand—and it may have much more than that—it will be in position to control not only the copper market, but the metal's uses.

If the Government should decide that people should have homes but not electrical appliances, it could stipulate that copper bought from the Government

could be used only for downspouts and plumbing equipment. It could eliminate other copper sources by the threat of price cuts that would make production of more copper unprofitable while the government stockpile existed.

It could prevent or retard new developments by the same price threat.

So long as these stockpiles of materials remain in the Government's hands, the Government will be in position to dictate terms to the industries that need them.

The nation's economy at the war's end will be less able to withstand hard impact, because it has become more finely balanced. Its reconversion will be infinitely more complicated.

Despite the great growth of the surplus problem, its solution has stood still.

The cutting of a new pattern to fit the new problem is a project that requires cooperation among all the forces it may affect. These include business, industry, labor, consumers, farmers and government.

It is America's post-war problem No. 2, and it will continue to grow because supplies will have a major part in winning the war, and the greater that flow becomes, the greater will be the surplus.

(EDITOR'S NOTE—America's Post-war Problem No. 3, the disposition of the tremendous holdings of real estate, industrial plant and equipment and other facilities acquired by the Government in the war program, will be discussed in an early issue. The No. 1 problem, the termination of more than \$75,000,000,000 worth of war contracts expected to be under way when hostilities cease, was described in NATION'S BUSINESS for May.)

THE NATURAL INDUSTRIAL CENTER OF THE WEST

"Takes your breath away, doesn't it, Tillinghast?"

"There's Metropolitan Oakland Area more than 2,000 miles from the old eastern industrial areas, yet now at the center of the fastest growing section of the Nation!

"Millions of new population, amazing war-time industrial developments, new ideas, new methods. Look how they build ships!

"Everyone is talking about the Coast's remarkable performance and potentialities, and Metropolitan Oakland Area is right at the center of it all. *There's a market for us...* with enormous plant capacity and supply of skilled labor for the postwar period."

"W-e-l-l, Mr. Edwards, we're known as a forward-looking concern..."

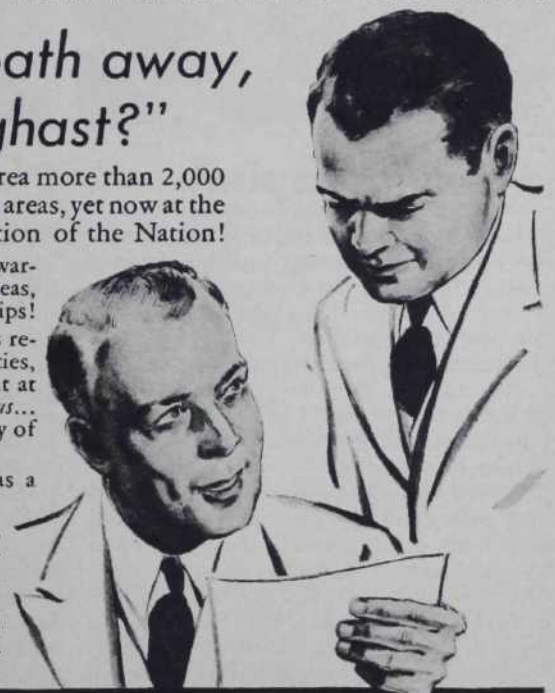
"I'm a step ahead of you, Tillinghast. Here's my airmail letter asking for information. We're going to start planning a postwar factory out there."

DECENTRALIZE! Metropolitan Oakland Area is the natural strategic location for your western plant. Most favorable costs of distribution. Terminus of three transcontinental railway systems, port facilities unexcelled on the Coast. Hundreds of thousands of new low-cost horsepower, skilled labor, unsurpassed factory sites.

Ask us to prepare a Special Survey directly applied to your operation.

METROPOLITAN OAKLAND AREA
389 Chamber of Commerce Building
Oakland, California 2317

ALAMEDA · ALBANY · BERKELEY · EMERYVILLE · HAYWARD · LIVERMORE · OAKLAND · PIEDMONT · PLEASANTON · SAN LEANDRO · RURAL COMMUNITIES OF ALAMEDA COUNTY



METROPOLITAN OAKLAND AREA

C A L I F O R N I A

Individual Post-War Planning

By MARCUS NADLER*

THE average business man can do little about the great changes taking place all over the world, nor can he contribute much to the broad economic and political post-war plans.

There is a far-away, almost ethereal, character to these matters as viewed from most plants now working at top speed turning out war materials. That job has obvious urgency. It is at hand at this very moment.

However, there is a down to earth, closer to home kind of planning that should concern the average business man today. He is able—and it is his responsibility—to put his own house in order, to make plans for the day when the national economy of the country,

and his own business, will be converted from war to peace.

The more efficiently private enterprise can adjust itself to the post-war situation and create employment for men discharged from the services and war factories, the less reason there will be for Government to intervene.

Now is the time to prepare for that adjustment. Your Government is not delaying its post-war plans nor, perhaps, are your competitors. Don't wait until you are engulfed in the problem. Outline your program while you may handle it with the care it should have. Here are six points to keep in mind:

*Economic Advisor and New York University Professor of Finance.



LOHR

Working Capital:

WE MAY ASSUME that the demand for working capital in the post-war period will be greater than during the '30's. Prices of commodities and labor, hence the cost of production, will be higher.

Nearly all concerns engaged in manufacturing will face the need of buying new machinery and equipment. Much now in existence will be either used up or partly obsolete.

Above all, adopt a conservative financial policy and prevent large indebtedness from coming due in the years from 1944 through 1946. Financial plans properly made now will put you in a position to meet contingencies that arise in the immediate post-war period.

Since almost every concern will need additional credit and capital, consider the advisability of taking advantage of present low rates of interest and favorable market conditions to issue bonds or preferred stock.

Perhaps you should adopt a dividend policy that would conserve cash. Some corporations may find it desirable to pay stock dividends and thus preserve their liquid resources. Explore the other ways of raising funds that will be needed.



Product Changes:

EVERY business organization should be fully informed of new developments in its industry.

New developments are particularly important when conversion from war to peace takes place. Can the product now produced be used for civilian consumption? Can your machinery be utilized to make civilian goods? What changes are necessary? What new products can you produce efficiently?

Of primary importance are the types of new products that may appear to compete with your own.

The answers to many of these questions may be found in research. Now, in so far as is possible, is the time to look for the solutions.

For a broader view of the field, designate an engineer, an executive and a salesman to study these problems. Let their study include new machinery and equipment. Many new types will be in the market after the war.

Try to reduce the high cost of production, which is largely due to the high level of wages, through the use of labor-saving devices. Only the low-cost producer will be able to survive.



GALLOWAY

Dealer Outlets:

BE READY to reach your market. Even though every job in the plant is a war order, don't disband entirely the sales force or overlook customer relations.

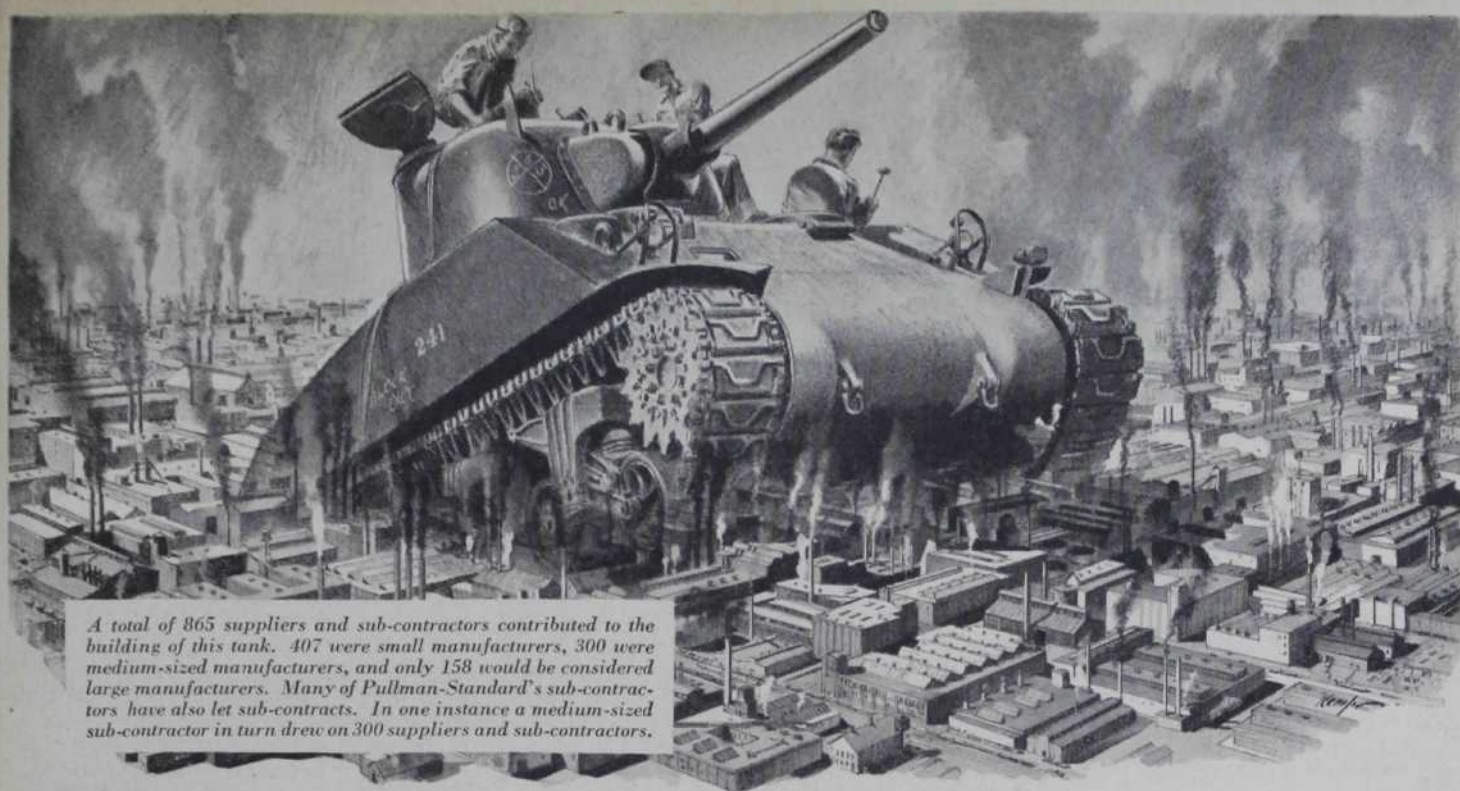
Don't overlook the fact that, as a result of the war, a large number of smaller retailers will be forced out of business because of lack of merchandise. Whether or not they will reopen after the war is uncertain.

The super-market system, which has played such an important role in food distribution, may be developed further and embrace a number of other commodities.

Survey the changes in distribution methods that have resulted from the war. Ascertain, if possible, whether these changes are permanent or will be eliminated as soon as conditions are more normal. Determine to what extent you can improve your marketing methods.

Even though you have no merchandise to sell for civilian consumption, you should—to the best of your ability—maintain contacts with your own customers, either directly or indirectly through advertising.

(Continued on page 76)



A total of 865 suppliers and sub-contractors contributed to the building of this tank. 407 were small manufacturers, 300 were medium-sized manufacturers, and only 158 would be considered large manufacturers. Many of Pullman-Standard's sub-contractors have also let sub-contracts. In one instance a medium-sized sub-contractor in turn drew on 300 suppliers and sub-contractors.

THE TANK THAT CAME OUT OF 865 PLANTS

Here's a deadly example of what well-disciplined teamwork can achieve —
a stirring proof that a sub-contracting relationship
can be the basis of truly democratic co-operation

Tough, merciless sluggers—these husky, vicious devils! Built to take it—outside. Built to keep everlastingly going—inside. We know, for we build them—here at Pullman-Standard—with the able co-operation of 865 suppliers and sub-contractors, large and small.

This smooth teamwork is the result of engineering—of patient planning and preparation. Even though Pullman-Standard's plants could have built practically the entire tank, yet was it clear that many manufacturers working together in a huge co-operative effort, utilizing investments already made, must surely build tanks and other essential war matériel a great deal faster than could any one plant alone.

* * *

Combing highway and byway, city and hamlet, Pullman-Standard sought capable, experienced team-mates for a vast share-the-work program; sought plants with management, men and facilities; sought and found them.

Brains worked together, pooled experience to develop sound methods, to perfect tool designs, to synchronize production schedules. In many instances Pullman-Standard loaned supervision to get the job going smoothly. And of every dollar received by Pullman-Standard for

a great fleet of 30-ton tanks, 80% is passed along to those suppliers and sub-contractors. Pullman-Standard itself—for coordination, painstaking engineering, exhaustive planning, manufacturing, assembly, rigid tests, and for assuming full responsibility for the tanks' unflinching performance—retains the remaining 20%, which in turn is distributed for labor, overhead, services and Federal taxes.

Participating in that tank program are 865 suppliers and sub-contractors, in 206 cities in 25 states—from a one-man shop to a great industry employing 150,000 workers—operating under 5432 contracts from Pullman-Standard.

* * *

Today, in addition to **TANKS**, Pullman-Standard has produced huge quantities of **HOWITZER CARRIAGES, TRENCH MORTARS, BOMBS, SHELLS** of various calibers and sizes, parts for **ANTI-AIRCRAFT GUN MOUNTS, AIR-CRAFT MAJOR SUB-ASSEMBLIES, FREIGHT CARS** for the Army, Navy, and Railroads, and **NAVAL PATROL CRAFT**.

Pullman-Standard is itself a sub-contractor—chosen to provide great quantities of other war matériel; chosen

because of particular fitness, long experience, ample facilities, and "know-how."

Eager to give "all-out" aid to the nation's war effort, Pullman-Standard opened its doors to all who sought to learn from its experience. Many came and still come—with the result that thousands of ordnance items are pouring forth faster in many plants, because alert manufacturers recognized methods for speeding production and adopted them.

* * *

Core and heart of this teamwork is Pullman-Standard's 84 years of varied and fruitful experience. Here, truly, are the endless resourcefulness of American industry and the stirring capacity to improve that are so characteristic of Democracy inspired to its ultimate best.

* * *

We long for peace—for a return to the kindly relationships of neighbors, to making things for pleasant, happy living. To those joyous tasks we shall bring new and better methods learned under the driving necessity of war! New comforts and conveniences of which we have not dreamed! Stirring proof that Democracy alone can make a world fit to live in!

BUY U. S. WAR BONDS and STAMPS

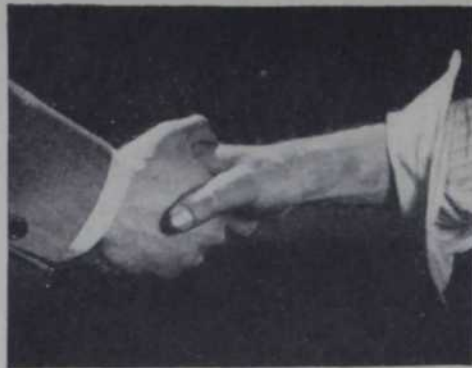


The Pullman-Standard plants at Butler, Pa. and Hammond, Ind. have both been awarded the Army and Navy "E" pennant for efficiency in production.

PULLMAN-STANDARD CAR MANUFACTURING COMPANY

Chicago, Illinois . . . Offices in seven cities . . . Manufacturing plants in six cities

© 1943, P. S. C. M. CO.



Labor Relations:

HANDLE your labor situation carefully. There is a real danger of serious labor difficulties when hostilities are over. Employees will not readily give up their war-time rate advantages.

Labor organization undoubtedly will continue during the war. Labor's political position still is increasing in importance. Through careful planning now you may be able to avoid interruptions in your own plant, even though there are strikes all around you in the post-war period.

Each organization, large or small, should have an executive responsible for handling labor relations.

Don't leave your labor problems to a foreman who is not authorized to rectify grievances. Minor grievances often cause major disturbances later on. See that they are disposed of while they are still minor.

Women war employees may constitute a problem. A considerable number will prefer to remain in industry. If business activity is high, this problem may not be difficult. But if business activity is not high, women may add to the oversupply of labor.



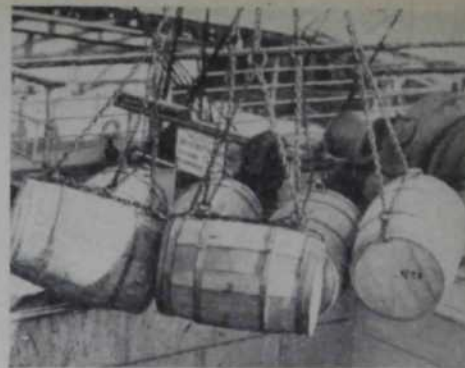
Returning Soldiers:

IT IS a good idea to keep a record of your men in the military services, perhaps to keep in touch with them. Many young men will develop qualities of leadership and initiative during their war service. Nearly all will profit by their experience. You will want many of them back in your organization. Morally, if not legally, you are under obligation to rehire them. Be sure you don't lose those who will be most valuable.

Many men who held only subordinate positions will become non-commissioned officers or will receive commissions. It would be a grave mistake to put these men back in their old jobs or positions at pay below that they received in the service. The knowledge, leadership and experience gained in war should be evaluated carefully.

Veterans will have first claim to jobs. Plan to give them jobs in keeping with their ability.

If men are returned to the same positions they left, many are bound to be dissatisfied and cause trouble. Careful handling of returning soldiers would contribute materially toward peaceful, satisfactory labor relations.



New Markets:

THE WAR has greatly increased the nation's productive capacity. It has also put a heavy strain upon it. Many industrial concerns will order new equipment as soon as possible to replace that which is not considered competitively productive in this country because of high wages, but which could still be used profitably in countries where the labor cost is lower.

If this is one of your problems, consider which countries will offer the best possibilities for exports, or for branch factories when peace comes.

Find out which ones have, or have ready access to, the necessary raw materials; which would welcome development and offer attractive circumstances. Perhaps preliminary arrangements can be made now with the Governments of these countries and you can be ready to act when hostilities end.

Although relatively few American concerns at present have subsidiary plants abroad, it is reasonable to assume that direct American investments abroad will increase and that this policy will receive government sanction and support.

Heroes on the Home Front

THE JAPS wouldn't like the story workers tell one another proudly at the American Rolling Mill Company's East Works plant in Middletown, Ohio.

A window-rattling roar and a column of hissing, white-hot steam accompanied a break in the main steam line at the plant. Pressure gauges sagged, workmen ran from their machines, and the defense organization jumped to the alert.

Excitement subsided quickly, but the steam pressure at the break grew ominously.

The broken main line *could* be turned off, but only if the entire plant were shut down. This meant a production stoppage on vital war steels. There was one alternative: By careful

planning, and hard work, the pipe could be repaired without turning off the steam.

The pipe-fitter crew—voluntarily—chose the hard way.

They decided to take the chance even as they realized that superheated steam pouring from the pipe made burns, even death, the penalty for a mistake.

Bucked steam 17 hours

PACKING their ears with cotton, winding cloth around their heads and using high-pressure air hose to force the steam away, they went to work under the eyes of a tense crowd. They bucked the steam for 17 hours without let-up. Having completed pre-

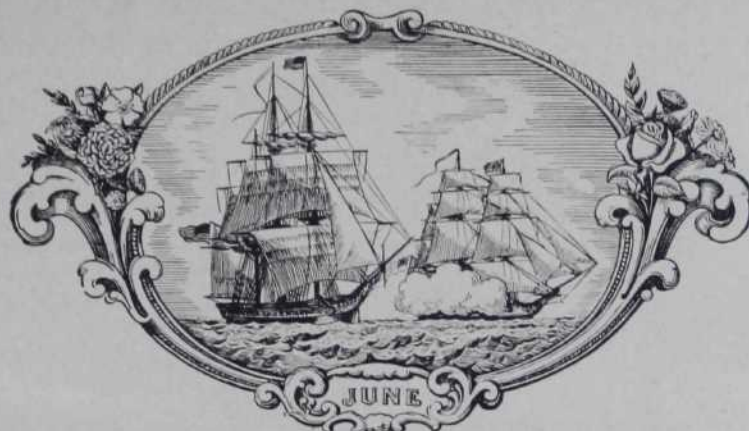
viously an eight-hour shift, the men really worked from 7:30 a.m. one day until 4 p.m. the next.

The break was sealed completely, no one was hurt, and war production went on without halt.

Later, the nine men who repaired the break—Frank Wendt, Frank Young, Clyde Combs, Robert Tewart, Blaine Trent, Melvin Ashcraft, Louis Kiss, Robert Price and Elbert Tannreuther—received from the company the George M. Verity Medal of Merit for outstanding service in war production.

Greater than the material reward to the men and their families, however, was the knowledge that they had tangibly put in a punch against the enemies of our country.

INSURANCE ALMANAC



On June 22, 1807, came momentous tidings that the U. S. S. *Chesapeake* had been fired upon by the British *Leopard*, one of the major incidents leading to the War of 1812. From then on, the mercantile marine, squeezed by Napoleonic Wars, subject to embargoes, was in chaotic con-

dition. Marine insurance rates were prohibitive, and many insurance companies turned to fire insurance, although with the burning of Washington and other British successes, local fire risks were great and rates high. In today's war, fire insurance rates are lower than in any comparable wartime period.

1943—JUNE hath 30 days

"In Wartime, Silence is Doubly Golden"

ASTRONOMICAL CALCULATIONS EASTERN STANDARD TIME

JUNE	LATITUDE +30°		LATITUDE +35°	
	SUNRISE	SUNSET	SUNRISE	SUNSET
1	5:00	6:56	4:38	7:08
6	4:59	6:58	4:46	7:11
11	4:58	7:00	4:45	7:14
16	4:58	7:02	4:45	7:16
21	4:59	7:04	4:46	7:17
26	5:00	7:05	4:47	7:18

JUNE	LATITUDE +40°		LATITUDE +45°	
	SUNRISE	SUNSET	SUNRISE	SUNSET
1	4:34	7:22	4:17	7:38
6	4:32	7:25	4:15	7:43
11	4:31	7:28	4:13	7:46
16	4:30	7:30	4:12	7:48
21	4:31	7:32	4:13	7:50
26	4:32	7:32	4:14	7:50

JUNE	LATITUDE +30°		LATITUDE +40°	
	MOON-RISE	MOON-SET	MOON-RISE	MOON-SET
1	4:16	5:49	4:02	6:06
3	5:40	7:38	5:19	8:00
5	7:14	9:16	6:51	9:39
7	8:56	10:41	8:36	11:00
9	10:41	11:55	10:28	
11	12:28	12:30	12:23	12:36
13	2:21	1:39	2:26	1:36
15	4:24	2:56	4:39	2:43
17	6:34	4:30	6:57	4:09
19	8:39	6:25	9:01	6:04
21	10:23	8:40	10:40	8:21
23	11:49	10:50	11:55	10:41
25	12:27	12:52	12:28	12:53
27	1:40	2:48	1:31	2:59
29	2:57	4:39	2:40	4:48

To obtain local times of sunrise and sunset: for longitudes other than the standard time meridian (i.e., 75°, 90°, 105°, 120°, for Eastern, Central, Mountain, Pacific Standard Time), decrease time four minutes for each degree east of standard meridian, or increase time four minutes for each degree west of standard meridian.

- 1—Tu.—John Masfield, English Dramatist and Poet-Laureate, born, 1875.
- 2—W.—☾ *New Moon*, 6:33 P.M., E.W.T. 1851—Maine prohibition law enacted.
- 3—Th.—☾ *Ascension Day*, Jefferson Davis born, 1808.
- 4—Fr.—U.S. Senate adopts woman suffrage amendment, 1919.
- 5—Sa.—Fire sweeps Constantinople, 1870—destroying 7,000 buildings. Loss estimated at \$25,000,000.
- 6—Su.—Avoid losses due to inadequate insurance. Check your property insurance regularly
- 7—M.—200,000 persons killed in Messina earthquake, 1910.
- 8—Tu.—Tennessee secedes from Texas declares war against Union—1861.
- 9—W.—☾ John Howard Payne, author of "Home, Sweet Home", born 1791.
- 10—Th.—☾ *First Quarter*, 10:35 P.M., E.W.T. Bureau of Budget created, 1921.
- 11—Fr.—Lumbermen's Insurance Company incorporated, 1873
- 12—Sa.—Have you acquired property recently? Make sure you have it covered by insurance.
- 13—Su.—Whitsunday, 1917. General Pershing and staff arrive Paris.
- 14—M.—Flag Day, 1940. Germans enter Paris.
- 15—Tu.—Excursion steamer General Slocum burns in East River, 1904—950 lives lost
- 16—W.—Congress created N.R.A., 1933.
- 17—Th.—Battle of Bunker Hill, 1775. Amelia Earhart starts trans-Atlantic flight, 1928.
- 18—Fr.—☾ *Full Moon*, 1:14 A.M., E.W.T. 1866—The National Board of Fire Underwriters organized. 77 years devoted to prevention of fires, and fire losses.
- 19—Sa.—The War Damage Corporation offers war damage insurance not covered in ordinary policies. See your Agent or Broker.
- 20—Su.—Fire sweeps St. John, N.B., 1877—100 casualties.
- 21—M.—Congress authorizes Boulder Dam project, 1929.
- 22—Tu.—Organization of U.S. Dept. of Justice, 1870.
- 23—W.—Your Insurance Agent or Broker is your expert adviser on insurance problems. See him twice a year.
- 24—Th.—☾ *Last Quarter*, 4:08 P.M., E.W.T. Cabots discover N. America, 1450.
- 25—Fr.—☾ Salem, Mass., destroyed, 1914—\$12,000,000 loss—large percentage compensated for by insurance.
- 26—Sa.—A.E.F. lands in France, 1917.
- 27—Su.—1880, Helen Keller born.
- 28—M.—1914, Franz Ferdinand of Austria assassinated. 1919, Versailles treaty signed.
- 29—Tu.—Pres. Wilson sailed for France, 1919.
- 30—W.—Diligent Hose Co. instituted, 1820—later becoming affiliated with Fire Association.

OBSERVATION for June:

Price levels are still rising. Replacement costs for some properties are up as much as 15 to 50% over two years ago. Many property insurance policies lag by this much in adequate coverage, and owners may stand to lose...

MORAL for June:

See your Insurance Broker or Agent today! Let him bring your insurance up to date. Check property insurance twice a year for your own security!

PROPERTY INSURANCE
Fire - Automobile - Marine

FIRE ASSOCIATION GROUP

Fire Association of Philadelphia
The Reliance Insurance Company
PHILADELPHIA



Lumbermen's Insurance Company
Philadelphia National Insurance Company
PENNSYLVANIA

SYMBOL OF SECURITY SINCE 1817



Keep This Arm On The Job!

Heat-Fag attacks workers who don't replace the body salt lost through sweating. Heat-Fag undermines vitality — destroys the will to work — makes men careless. And, in many cases, it is the direct cause of lost man-hours, absenteeism and accidents.

Heat-Fag is the all-out, unseen enemy of production. Thousands, yes, millions of precious man-hours can be lost through this insidious force that saps men's strength — lowers their efficiency — wears them down before the shift is over. Salt sweated from the body must be replaced — or Heat-Fag takes its toll.

In all leading industrial plants — wherever men sweat and do hot work — salt tablets are a "must".



© HEAT-FAG

MORTON'S
Heat-Fag
SALT TABLETS

QUICK DISSOLVING
(Less than 30 seconds)

How a Morton Salt Tablet looks when magnified. Soft and porous inside, dissolves in less than 30 seconds with a drink of water.

Case of 9000, 10-grain Salt Tablets - - \$2.60
Salt-Dextrose Tablets case of 9000 - - \$3.15

Place MORTON'S DISPENSERS at all Drinking Fountains

They deliver salt tablets, one at a time, quickly, cleanly — without waste. Sanitary, easily filled, durable.

500 Tablet size - - \$3.25
1000 Tablet size - - \$4.00

Order from your distributor or directly from this advertisement. Write for free folder.



MORTON SALT CO., Chicago, Ill.

Washington War Survey

From the Records of the U. S. Chamber's

War Service Division

New Draft Order—WMC issues new Selective Service orders calling for induction into the armed services of every able-bodied man between 18 and 38 by end of 1943, except 3,200,000 deferred for essential industry and agriculture, and hardship cases; revises classifications for registrants.

★ ★ ★

Rejections under Selective Service—Selective Service Medical Unit reports 25 per cent of 18 and 19 year olds examined found unfit for military duty; percentage higher in older groups.

★ ★ ★

Shipbuilding Industry Manpower Shortage—Goal of 18,000,000 tons of ships in 1943 threatened by critical manpower shortages says Maritime Commission; deficit estimated at 70,000 workers.

★ ★ ★

Relocation of Physicians—WMC reports that approximately 600 physicians have changed places of residence and practice better to serve civilian medical needs.

★ ★ ★

Unemployment—Census Bureau reports unemployment in March, 1943, at level "not far above irreducible minimum"—a total of 1,000,000 persons; March, 1942, 3,600,000 unemployed.

★ ★ ★

48-Hour Week—American Iron and Steel Institute estimates rise of \$100,000,000 in steel industry pay rolls if 48-hour week is made mandatory in all plants.

★ ★ ★

Aid for Smaller War Plants—Smaller War Plants Corporation and U. S. Chamber of Commerce set in motion plan to assist smaller manufacturers to get war orders. Quartermaster Corps offers \$200,000,000 in immediate orders to small business, including pistol belts; pack carriers; shoes; woolen blankets; small trailers and hand trucks; overcoats; water buckets; leather mittens; and 11,000,000 yards of fabric.

★ ★ ★

Scrap Campaign Results—Petroleum Industry War Council announces net of \$1,500,000 from 1942 scrap rubber drive; funds allotted to Army Relief, Navy Relief, and Red Cross. Stocking salvage campaign reports receipt of 888,000 pounds of discarded silk and nylon stockings in first four months of collection.

Power Capacity—70 per cent of generating capacity, added in 1942 to speed war production in 11 Far Western states, provided by Bureau of Reclamation power plants, reports Secretary of Interior.

★ ★ ★

War Costs—Treasury Department reports American war costs during first three-quarters of fiscal year totaled \$54,954,648,579; 1942 total for same period, \$20,249,967,607.

★ ★ ★

War-time Food Demonstrations—Agriculture Department lists seven basic food groups and announces program of food demonstrations under auspices of local defense councils to emphasize importance of use and proper preparation of such foods.

★ ★ ★

Absenteeism—Absenteeism in industrial plants in 1942 resulted in loss of more than 422,700,000 man-days, says National Industrial Conference Board.

★ ★ ★

Incentive Pay Program—WPB approves try-out of "incentive" pay program in certain aircraft plants in effort to increase production.

★ ★ ★

Increased Civilian Allotments—Office of Civilian Supply announces list of 200 "hard goods" items, production of which will be increased for civilian use. WPB orders release of approximately 400,000 household refrigerators for general public—148,847 electric or gas operated; permits production of 250,000 ice boxes. Army transfers to Food Distribution Administration 12,000,000 cases of canned fruits, vegetables and juices for civilian consumption.

★ ★ ★

Housing for War Workers—WOB and NHA establish procedures for assignment of preference ratings and allotment of materials for privately-financed war housing construction under Controlled Materials Plan.

★ ★ ★

Renegotiation of Contracts—Price Adjustment Boards of War, Navy and Treasury Departments and Maritime Commission jointly announce adoption of uniform price adjustment policies and interpret renegotiation statute as affecting war contractors and subcontractors.

—E. L. BACHER



INVISIBLE PARTNERS HELP BILL BLAIR

TODAY, he welds a broken axle for Ed Merritt's truck. Tomorrow, he'll reface a worn-out gear for the folks at the flour mill. Or mend that broken wheel on Farmer Jones' cultivator. That's Bill's wartime job—keeping vital equipment running when repair parts are so hard to get.

Folks say Bill's a "wizard" at it. Whatever the welding problem, he has the answer. His welds stand up. He does a *better* job. That's why he gets most of the work these days.

But what folks can't see are the invisible partners backing him — scores of welding specialists, extensive research facilities, and a practical proving ground of welding that covers almost 26 acres in Milwaukee. As a user of P&H welding equipment, these valuable resources are at his disposal, helping him to improve and extend the usefulness of arc welding.

Today, all effort is concentrated on winning the war — in shipyards, arsenals, at the fighting front — and in count-

less small welding shops. But these men also look beyond the horizons of the present — toward the day when many of the wartime developments in welding will be applied in a richer, happier, peaceful world.



MILWAUKEE • WISCONSIN
Electric Cranes • Electric Hoists • Welders
Welding Electrodes • Excavators

What is Freedom of the Air?

By L. WELCH POGUE



Before we can have air transportation on a world-wide basis, the nations must remove the artificial barriers which have been set up

IN TIME of war, the airplane is a destroyer of civilization. But after the war, the airplane—if wisely used as a vehicle of trade and travel—may be our best means of keeping the world at peace.

Traveling at 300 miles an hour—a cruising speed which transport planes could attain shortly after the war—it will take less time to go from New York to Moscow by air than to go from New York to Chicago by train. It will take less time to go from Minneapolis to Tokyo by air than from Minneapolis to New York by train.

The airplane, by pulling the world closer together, will be a force for good. But, before it can be made to

fulfill that purpose, certain peace-time problems of international air operations must be solved:

1. **Problems concerning military aircraft:** the extent to which military planes shall be permitted to fly outside their own countries.
2. **Problems, in the non-military field,** having to do with the requirements each country lays down for the operation over its domain of its own and foreign aircraft: safety, customs, immigration, traffic control, public health.
3. **Problems involving the rights of**

THE CHAIRMAN of the Civil Aeronautics Board offers a common sense program for international air commerce

private and commercial aircraft of each country to fly over and to land in other countries.

Let us confine ourselves here to the *rights of commercial aircraft*. These problems are not only interrelated with many matters of national concern, but also inject new considerations into the international picture.

Terms are lacking

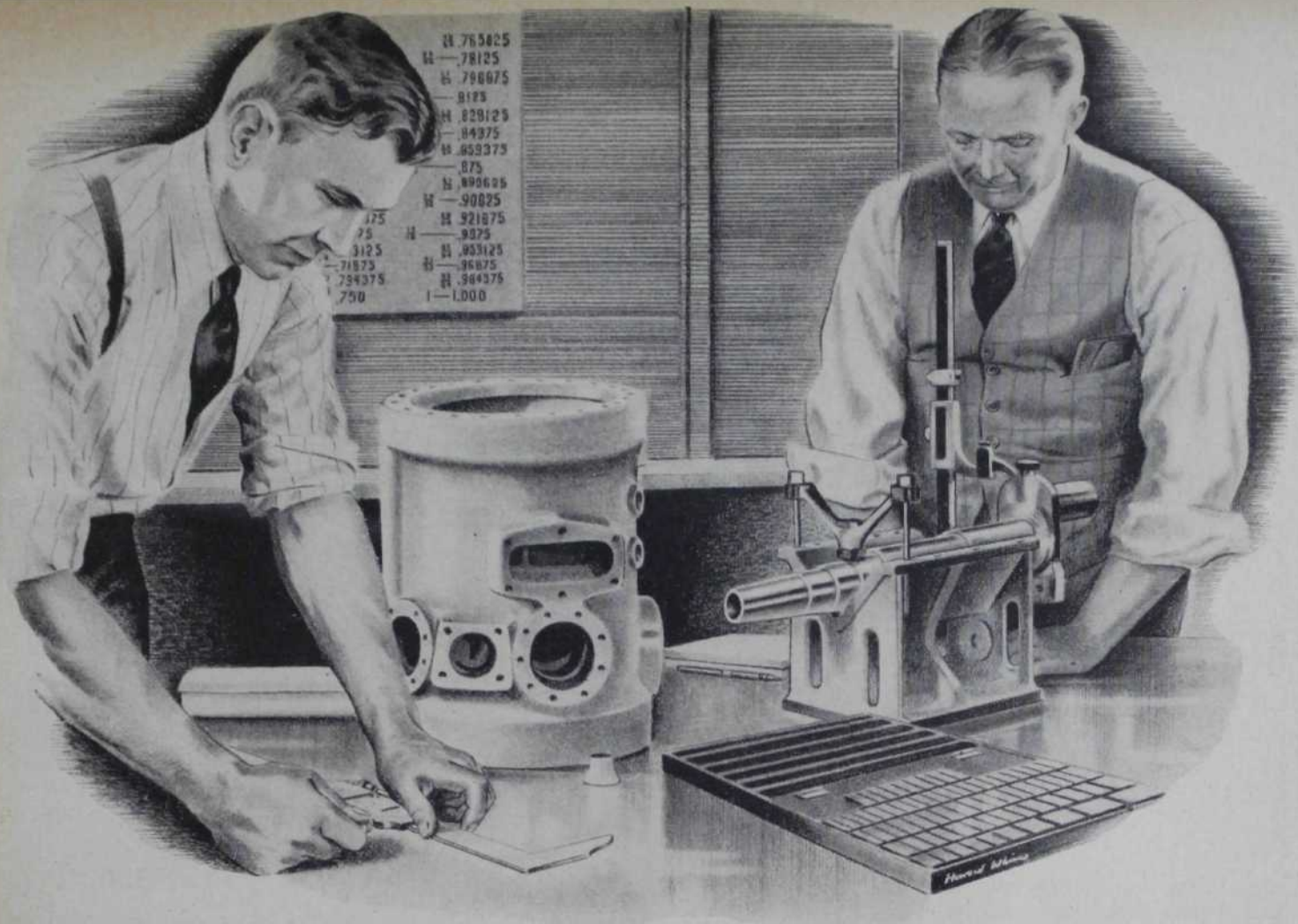
WE make a mistake, therefore, if we assume that the future of aviation can be worked out more or less as an incident in relation to other issues. Hard, close thinking is necessary if the future of world aviation is to be soundly planned.

Heretofore, the field of international aviation has lacked even an adequate accepted terminology. Such terms as "air sovereignty" and "freedom of the air," for example, mean all things to all men. Without some agreement as to the meaning of such terms, cooperative effort among nations, the key to the solution of the major problems of international aviation, is clearly impossible.

But we cannot even begin with definitions. We must first analyze some of the problems which we are trying to define.

Today all nations must decide to what extent artificial barriers can and should be removed from the path of world aviation. This is an important issue to our own country because it will determine the extent to which America, for years to come, shall have the right to engage in air commerce, over the shortest routes and in the most economical way, with other nations.

Out of the past has grown a doctrine of international law under which each nation may legally exclude foreign commercial planes from the air



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The super precision of America's war weapons calls for tolerances measured in tens of thousandths and millionths of an inch. Temperature and humidity control is essential in gauge rooms! Metals shrink or expand beyond rigid specifications when temperatures change . . . specks of dust . . . even finger-prints caused by excessive humidity can bring about the rejection of many hours of fine craftsmanship.

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space over its domain. Special permission—generally obtained through tedious negotiation—is now required before any commercial aircraft may enter or pass through a foreign nation's air space.

Special permission is also required to land on foreign soil, not only to discharge or take on passengers and cargo, but for the far more limited purposes of refueling, making repairs, or taking refuge from storms.

Oliver J. Lissitzyn, in discussing international aviation problems in his book "International Air Transport," says:

The necessity to bargain for landing rights has exercised a retarding effect upon the development of world air commerce. Routes which are technically feasible and commercially promising have remained unopened. . . . Small but favorably situated countries have at times exacted conditions for the grant of landing rights that may have been financially burdensome to the foreign carriers involved.

Italy, at a time when Italian air transport was weak and highly unprofitable, refused to grant landing rights to the British Imperial Airways on their way to the East, unless the British company's receipts on a certain run were divided equally with the Italian company, which had much less traffic.

Iran compelled Imperial to shift its route to the southern shore of the Persian Gulf by insisting that, in flying over

Iran, the company's planes follow an inland route over mountains and deserts that was found to be too difficult and dangerous for use.

Turkey barred all foreign air lines from passing over it in an east-west direction, primarily for military reasons and, as a result, European services to southern Asia were deprived of the use of the shortest route. Turkey's attitude redounded to the advantage of Greece, which, it was reported, required all foreign air liners passing over its territory to land at Athens and to coordinate their schedules with those of the internal Greek air services. Similar illustrations could be multiplied indefinitely.

You have to get there

OBVIOUSLY, before you can discharge and take on passengers and cargo at a foreign point, you must get there. In most cases, intervening countries must be crossed. The question of the right to get there is the first problem we meet in the international air riddle.

In the field of private flying, the right to pass through the air space of a foreign country is known as the right of innocent passage. In the field of commercial flying, this right to get there has no name. Let us give it one now.

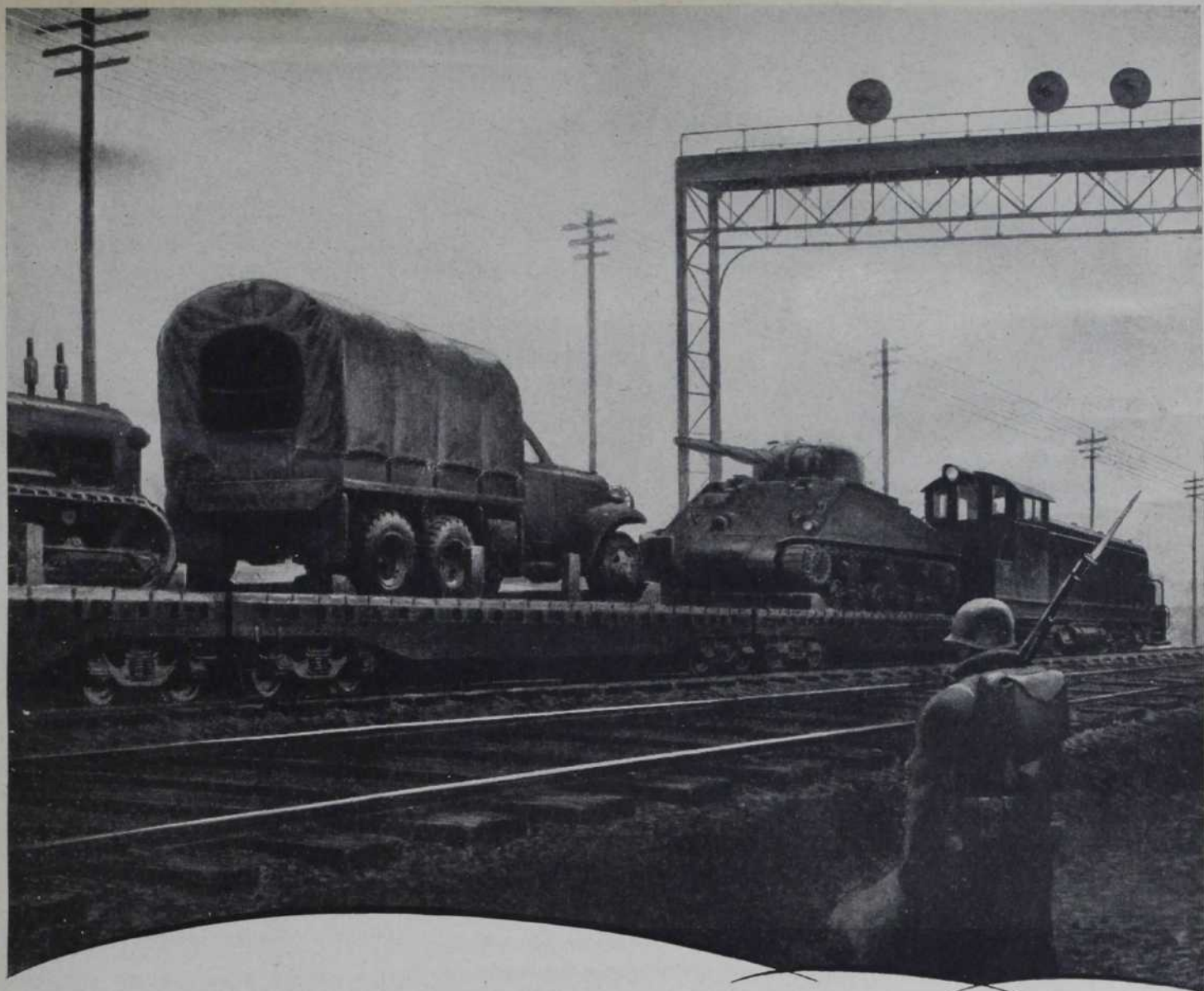
We shall call it the right of commercial air transit. To assure common understanding of the term, let us define it as the right of commercial aircraft to

BELLRINGER



Recruiting Relatives

Many personnel managers have learned they can recruit good employees from families of present good employees, but the Douglas Aircraft Company claims it has the largest single group of relatives employed by one concern in the aircraft industry as it points to the Adamson clan of Santa Monica, Calif. No less than 11 members of this family, including Mr. and Mrs. Perley Adamson ("mom" and "pop"), work in 11 separate departments at Douglas—without a riveter or welder among 'em! Ages of the group range from 20 to 65. The three oldest, oddly, work the third, or "graveyard," shift.



WAR JOBS WELL DONE MEAN LOWER FUTURE POWER COST

SCARCELY anything you can name fills so many different war jobs as the General Motors Diesel engine. In tanks, landing boats, patrol boats, trucks, tractors and auxiliaries—everywhere sturdy dependability is needed—they're supplying power for our fighting forces.

The result is that though plant facilities have mushroomed and production records are broken time and time again, everything we can make is hustled off to war.

But there is this important com-

pensation. These accelerated war demands are advancing GM Diesel production and technique years faster than could the demands of ordinary peacetime manufacture.

So we can look forward to lower-cost power and to new peacetime applications for these engines when the war is won—to broadened fields where this power will serve.



New eras of railroading follow in the footsteps of war. Another new era of railroading is assured in the wake of this war. General Motors Diesel locomotives already are establishing new standards of transportation.



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LOCOMOTIVES ELECTRO-MOTIVE DIVISION, La Grange, Ill.



DAYBREAK...

...heavy guns moving into position for action on the African Front... planes returning from a night "bombing party" over Axis territory. And, on the home front, loaded munition trains whistling shrill warnings as they approach slumber-wrapped towns in Kansas, Massachusetts, Texas—*everywhere*. It is WAR—war with its toil and tears, its heroism and sacrifices.

BUT SOME DAY WILL COME ANOTHER DAWN—a sunrise that will light up a world at peace. Then trains will speed across the nation carrying ration-freed foods for America's pantries; materials for its home builders; tools and implements for its farms, factories and professions; and peace-time necessities for all!

Now we are engaged in war. America's railroads—all vital units in the transportation army—are performing a patriotic service. Theirs is the hauling job of the nation. And what a job they are doing—41,000,000 tons of army freight carried in '42—11,600,000 troops transported during the first year of the war!

ROCK ISLAND'S Program of Planned Progress, begun seven years ago, is being carried on even in the midst of the war. For when the new day dawns America will demand the best in rail transportation. While today it isn't possible to buy all of the equipment and materials required, we must have the revenue now for the great backlog of purchases that some day will be released. And think of the many jobs this will make available for our boys now in uniform!

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One of America's Railroads—ALL United for Victory

fly through the air space of any nation, which has agreed to the international arrangement. It would include the right to land at agreed airports to refuel, to make repairs or to avoid bad weather. It would *not* include the right to discharge or take on passengers and cargo.

The right to discharge or take on passengers and cargo might be called the *right to a commercial outlet*. This would *not* include the right to carry traffic between points in our own or in a foreign country, a right called "cabotage." That right will normally be reserved, naturally, for a nation's own airlines.

Of course, commercial outlets at desirable points are what we want. Many nations will see commercial and possibly other advantages to themselves in becoming such outlets for foreign air transportation; and some nations, having their own foreign air transportation systems, will naturally seek reciprocal arrangements for commercial outlets.

The right of *commercial air transit*, as has been said, means the right to get there. Our own enlightened self-interest, and that of all other nations, requires that, as part of aviation's future international arrangements, aviation be generally granted this right of *commercial air transit*.

World-wide framework

SUCH a charter, flexible like our own Constitution, would constitute a world-wide framework, facilitating the future establishment of commercial outlets at all points where future world developments may make them desirable.

When the Convention for the Regulation of Air Navigation was held in Paris in 1919, certain provisions affecting the right of commercial air operation through the air space of a foreign nation were not entirely clear. Some of the countries, notably England and the United States, favored interpreting these provisions as authorizing commercial aircraft of any of the parties to the Convention to operate over the territories of the others provided only that they follow designated routes.

Other nations interpreted the original provisions as permitting such operations *only after permission was obtained* from each nation through whose air space any commercial operation would pass.

In 1929, an amendment settled the ambiguity in favor of the latter construction, 27 nations favoring the proposal and four—England, the United States, the Netherlands and Sweden—voting against it. The United States has never ratified this Convention, either originally or as amended.

Twenty-one nations of the Western Hemisphere in 1928 completed and signed the Pan-American Convention for Air Navigation, known as the Havana Convention, under which each of the countries agreed to permit commercial aircraft of the others to pass through its air space provided designated routes were followed. However, only a few nations (the United States being one) have ratified this Convention and

H...E...Y...! THAT FAN ISN'T SCRAP!



Uncle Sam needs scrap, but doesn't want you to throw away irreplaceable things—like fans—that contribute to wartime efficiency.

Until the war is won, no more Emerson-Electric Fans are being made for civilian use, because their manufacture involves many critical war materials. All the fans now produced are for the Army, Navy, and other essential War Services.

So, if you own electric fans—no matter what make—take good care of them. Then, when summer comes, their cooling breezes will provide you comfort at your work, help you get refreshing sleep at home, and keep you up to par all through the hot weather season. That is important.

If you own Emerson-Electric Fans, you are fortunate. Their

exceptional quality and long-life construction are greater assets now than ever before—they make your fans worth the care superior products deserve.

Backed by the famous "5-Year Factory-to-User Guarantee"—many Emerson-Electric Fans are still going strong after 25 and more years of service!



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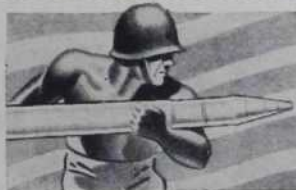
To get the best possible service from your Emerson-Electric Fans, follow these suggestions:

- 1** Don't wait. Check your fans now and you will be sure they are ready when you need them.
- 2** If they operate satisfactorily, clean them thoroughly, and oil with medium-weight mineral oil, grade SAE 10 or 20.
- 3** If there is any unusual noise or vibration, due to worn parts, or faulty electrical connections, take the fan to your Emerson Dealer or Electrical Repair Shop to determine whether it can be repaired. (Generally, if your Emerson-Electric Fan is not more than 20 years old, parts are available.)

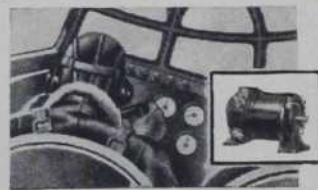
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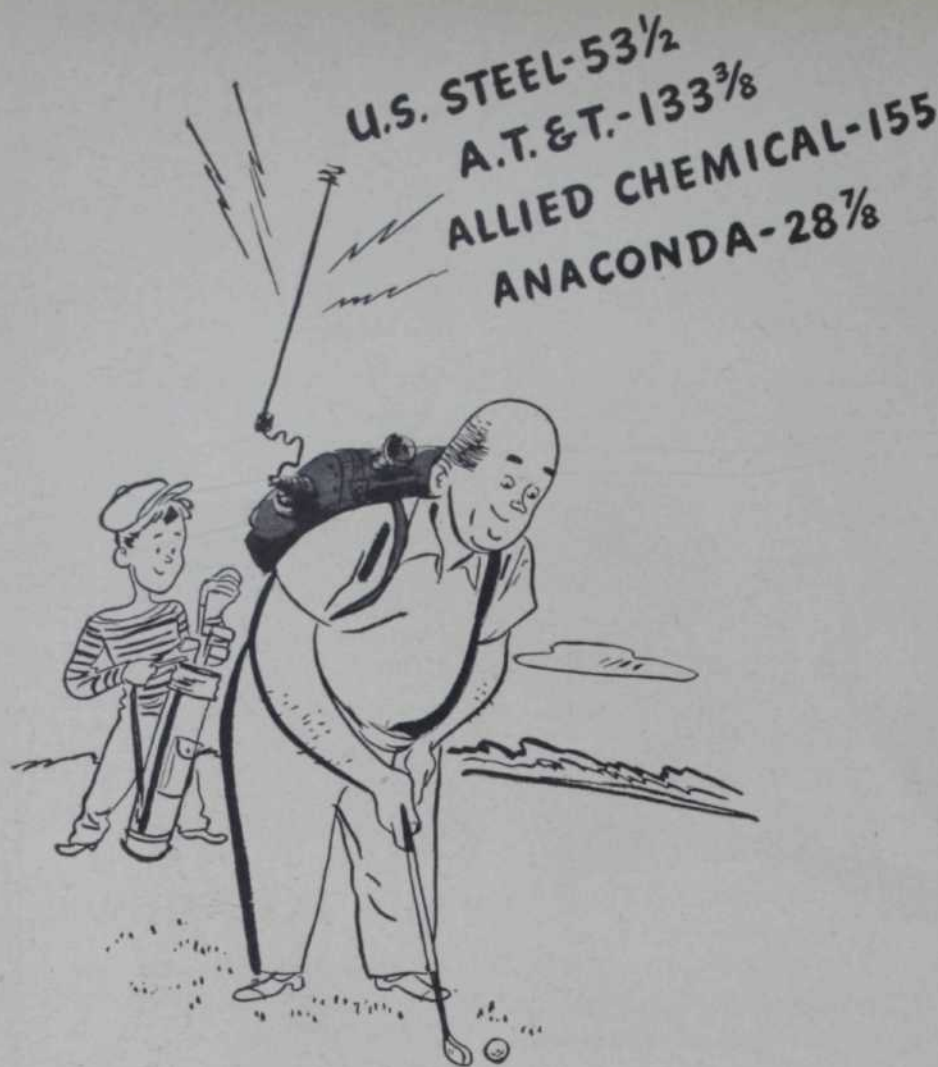
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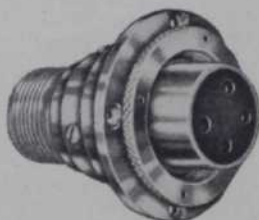


THE "Walkie-Talkie" of the Army is sure to find plenty of private uses when the fighting's over.

Whether the golfer, with his eye on a close putt, will give ear to the market's meanderings is anybody's guess.

But one thing is certain: Wherever radio and other electronic devices are used, there will be specialized connectors.

And Cannon Connectors, which meet wartime specifications today, will be used tomorrow wherever dependability is essential.



This AP Connector is used in communications equipment. Besides wartime uses, Cannon Connectors are standard in a score of industries . . . radio, television, sound apparatus, aviation and in geophysical research, to mention only a few. Wherever electrical circuits must be connected or disconnected quickly and with 100% dependability and safety, there you'll find Cannon Connectors.



CANNON ELECTRIC

Cannon Electric Development Co., Los Angeles, Calif.

Canadian Factory and Engineering Office: Cannon Electric Co., Ltd., Toronto

REPRESENTATIVES IN PRINCIPAL CITIES—CONSULT YOUR LOCAL TELEPHONE BOOK

it, of course, does not apply to the rest of the world.

So generally, throughout the world, the establishment of both the right of *commercial air transit* and *commercial outlets* requires the negotiation of agreements with each nation whose air space is used.

It is sometimes urged that we cannot permit foreign planes to fly over our territory and thus have the opportunity to see and photograph our entire country with all of its military and defense establishments.

That argument overlooks the fact that our own domestic airlines, covering many more routes than would ever be used for *commercial air transit*, are always available to any one.

The United States lies on Canada's shortest route to Mexico, Central America, South America and the Caribbean Area. China occupies a somewhat similar position with respect to Russia's shortest route to southeast Asia. Alaska lies athwart Canada's probable route to all Asia. Canada, in turn, lies under our Great Circle courses to both Asia and Europe. And Russia extends along all the north and much of the west of China. Certainly these four nations should strongly support the right of *commercial air transit* on a world-wide basis.

New trade routes by air are inevitable. But if every nation is to control the air space over its own territory, the benefit of international operations may be lost. The problem, therefore, is what kind of common sense arrangements can nations make for commercial use of the air.

First, of course, they could continue the unsatisfactory practices of the past.

Second, they could, by a single agreement between nations, *designate particular routes and airports* for international air traffic. This suggestion assumes the ability to determine for all time the future map of international air commerce, a task obviously impossible now.

Third: "Zones of influence" throughout the world could be assigned, one to each nation having extensive air transport industries. Such a plan has an obviously limiting effect on the rights of smaller nations, as well as the inherent danger that overlapping of zones would create friction. Furthermore, any such arrangement is inconsistent with the operational characteristics of the airplane which knows no boundaries or barriers.

Fourth and more practical, each nation which is a party to the *commercial air transit* agreement would grant each of the others the right of *commercial air transit* for non-military aircraft over its domain, thus enabling the planes of each to fly to their *commercial outlets*.

Already we know something, but far from all, about the changes the airplane will bring. It has reduced the world to manageable proportions. Let us have the vision, and above all the courage, to give to aviation a charter equal to its need. That is common sense, and common sense eventually will and must win out in the solution of world aviation problems.

*America puts on
its War Paint...*



...with Rayon!

HERE IS ONE of the latest achievements of American research—a paint brush with bristles made of rayon.

Making its appearance at a time when brush materials are critically short, it is no war baby, no temporary expedient. Its story goes back to 1934, when Devoe and Raynolds Company decided that American ingenuity could devise an answer to the many perplexing problems besetting the import of boar bristle from Asia.

Through a cooperative research program, American Viscose and Devoe and Raynolds succeeded in producing a synthetic bristle, Deraytex, with many advantages over the natural product.

To make this new bristle, rayon is coated with a special plastic, in a remarkable mechanical process which gives it the taper so necessary for a good brush. The result is a brush that has 100% of the wearability of boar bristle in ordinary usage, the same amount of flexibility, and a great deal more softness. Each bristle has

forty tiny paint-spreading "flags," compared with four on nature's best. This brush costs approximately 25% less than any comparable bristle brush to be had today. It is suitable for use with 85% of the paints now on the market. It is unsuited for use with paints that have a water, alcohol, or lacquer-thinner base.

This new brush will not only help America put on its war paint. It will help save the livelihoods of several hundred thousand painters... plant, office, and home property worth millions... and equipment which must be protected against rust and corrosion. It is a real contribution to conservation now... and in the future.

It is just another example of new uses for rayon, and another of the many roles that this versatile fiber is playing in solving problems in a changing world. Rayon—the same fiber that is today serving our armed forces in tires for bombers and jeeps, and in parachutes which carry punishing loads of equipment safely to earth.



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Lauren Slade goes to work in his wheat field after putting in a full day building planes for Boeing

Aggie Aircrafters

YOU can't just take that kind of thing for granted. So you go up to see his foreman.

"On the level," you want to know, "how is he?"

"Joe Freeman?" the foreman grunts. "One of the best toolmakers we have."

"But—what about absences?" you persist.

"What about them?" he says. "No trouble there at all. Oh, sure, we had to give him a sick leave once. That was when he got himself kicked by a porker on his farm. But otherwise. . . Why? What's up?"

You tell him that you're flabbergasted by Joe Freeman, who, after putting in a full shift in the plant, drives home every afternoon at 3:30 and spends five hours farming his 200 acres—caring for 28 head of cattle, 26 hogs and 150 chickens—and, on top of that, takes upgrading courses in blueprint reading.

The foreman looks at you. "Huh," he says. "Joe Freeman is only one."

There's Kenneth Garten who, like Freeman, works in the Boeing Aircraft plant building planes. This 30-year-old crack jig builder lives 191 miles from the plant, has 1,000 acres in wheat, uses four combines to cut the 35-bushels-to-the-acre crop. He plants his wheat on Saturdays and Sundays, uses week-ends in other seasons to work the farm.

There's R. R. Lavy, a turret lathe

operator, who farms 450 acres of wheat 140 miles from the plant. Married, with three children, Lavy rents a room in Wichita near the plant, but goes back to the farm to work over week-ends, spends his summer vacation completing the harvest.

There's Lawrence Pratt, 22-year-old mechanic in final assembly, who lives eight miles from the plant. Every morning, he does six hours in his father's 160 acre wheat field, then reports for work at the plant from 4:30 to 12:30 A.M. Killing work?

These men are typical of hundreds of Kansans who are serving on two production fronts. It's no easy task.

"We can find time to produce the crops," reports Lauren Slade. "Where we lose time is on keeping up our fences and barns."

Slade works on the first shift, 7:30 A.M. to 3:30 P.M. He has 12 cattle, six sheep and a horse on his 50 acres. He has a son in the Army Air Corps.

There are disappointments, many of them cruel. Last year, high water and insect pests took most of S. G. Kelly's crops, but he is trying again this year. Kelly travels 180 miles a day between his Oklahoma farm and Wichita. He has a quarter section of land, 20 cattle, including 11 milk cows, 17 hogs, two mules and 160 chickens. Helping him are his wife and three children, the oldest 13. Kelly is a veteran of the last war.

"I wish I could do more," he says.

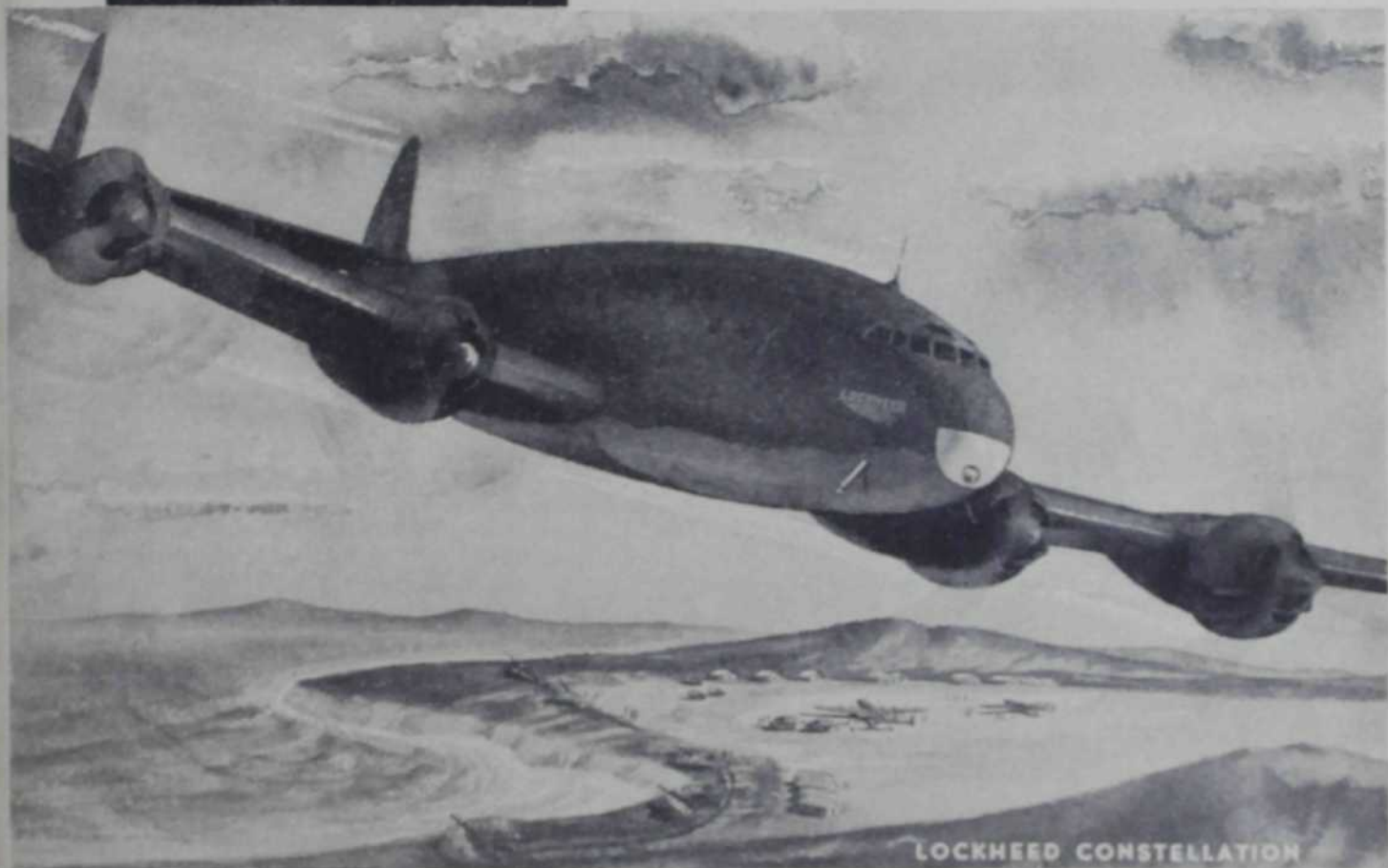
—LAWRENCE N. GALTON

ROHR

PARTS ✧ ASSEMBLIES

*"Get thar Fustest
with the Molest!"*

Expressive phrase of a famous Confederate fighter



LOCKHEED CONSTELLATION



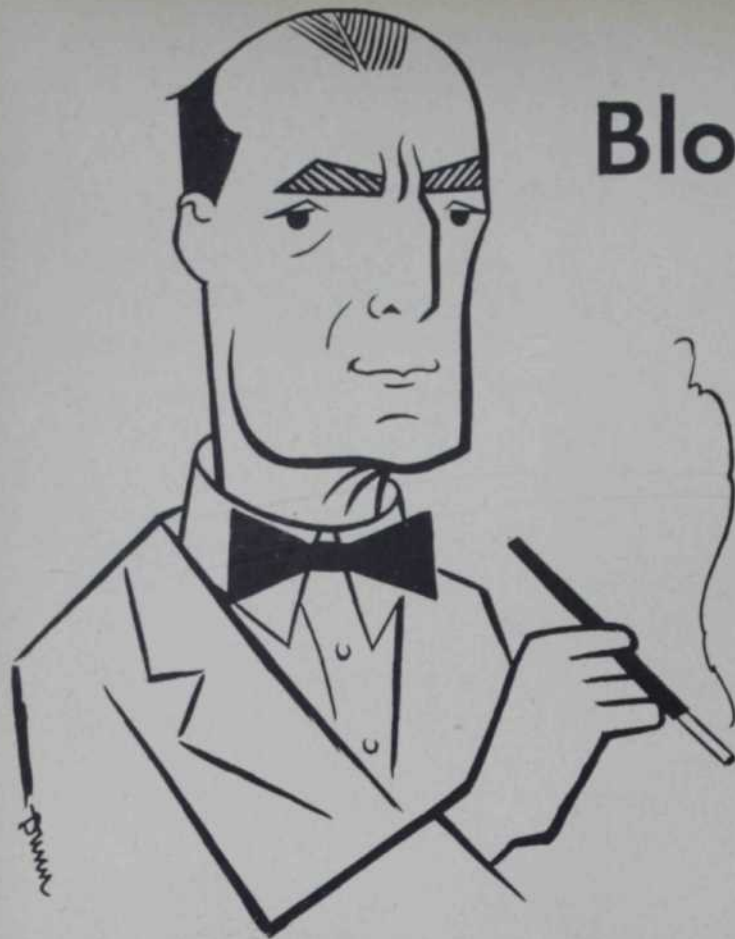
BUILD 'em bigger, fly 'em faster, do it first and do it in quantity--America's axiom for supremacy of the air! No goal in American history was ever more urgent! ROHR production fighters force their tasks of precision parts manufacture and vital assemblies toward this end. ROHR-equipped air giants fly to battle in ever increasing numbers, rushed there by the men and women on production lines who know that *speed saves lives!*

HELPING TO WRITE
THE STORY OF TOMORROW

ROHR AIRCRAFT CORPORATION



CHULA VISTA, CALIFORNIA



REGINALD C. FOSTER, in charge of Civilian War Services, directs the greatest "army in mufti" ever to be mobilized on this continent

REGINALD C. FOSTER, assistant director in charge of the Civilian War Services Branch of the Office of Civilian Defense, leads the greatest "army in mufti" ever mobilized on this continent. He has, in his own words, the responsibility of directing more soldiers—volunteers, to be sure—than does Gen. Dwight Eisenhower. It is even doubtful if Gen. George C. Marshall will command as many men by January 1 as Reginald C. Foster has at his partial command today.

Mr. Foster is chief of all Civilian Defense Councils, chief of all block leaders and director of all civilian war work, except that in OCD's protection branch.

The OCD, with an appropriation of \$100,000,000 for the purchase of air-raid equipment and an annual budget of \$8,000,000 for administrative expenses (and more from the President's personal fund, if needed), has two cleancut divisions, or armies.

One of these is for protection alone. Made up of thousands of air-raid wardens, whose principal task is to

Block-Aid Runner for the OCD

By LARSTON D. FARRAR

protect life and property in case of emergency or enemy attacks, its leader is Gen. Ulysses S. Grant, III.

OCD's other army is for "coordination" alone. In it are other thousands of patriotic citizens, whose duties are innumerable. It is led by Mr. Foster.

What General Grant's civilian army does is apparent and no one, yet, has gone on record as questioning the wisdom of having it.

What Mr. Foster's army does is not apparent, and many persons, including several Congressmen, have

wondered if it is fulfilling a function in line with its cost of operation.

Just the other day, *The New York Times* reported receiving a pamphlet entitled, "Consumers Wartime Digest," published by the Civilian War Services Branch of OCD, which opens with a campaign for grade labeling.

The Times, though taking no stand on grade labeling, questioned what this subject has to do with protecting the populace against bombing. The paper also asked, "What right has any group in this national war-time agency to . . . promote its own economic ideas?"

Many Congressmen say they cannot comprehend just what Civilian War Services Branch is trying to do. Others say it is being used as a tool to promote a fourth term and that block leaders are being educated to carry a party line into every home, along with information on how to flatten tin cans and save fats for WPB.

Mr. Foster naturally takes little official notice of such talk. As you sit in the converted apartment in the

Dupont Circle Building in Washington, where Mr. Foster directs his far-flung work, you cannot but be impressed by the urgency of the action he typifies and the enormity of the tasks he faces.

On the walls of the office, which in a less-hurried day served as a bedroom for some peaceable citizen, are large military maps, showing the black tentacles of the Axis creeping ever closer to Washington. Other maps show the dispersal of our troops throughout the world. And, of course, there is a map showing the dispersal of Mr. Foster's own troops—members of the 14,000 local defense councils throughout the nation.

Waving a king-sized cigarette in a five-inch holder, and moving about restlessly, Mr. Foster describes the more challenging aspects of waging a total civilian war.

Awake at night

"THE responsibility of directing, in effect, the work of 11,000,000 volunteers—at latest count—from coast to coast is not an easy one," he says in accents strongly British, but with a hint of Boston's Back Bay. "I lay awake the other night, thinking: What a job it is to plan for an army twice the size of Eisenhower's! We have twice as many volunteers in our army as he has in Africa today. And the task facing us, while of a different sort, is nevertheless a terrific one."

Although the District Commissioners of Washington, D. C., only the day before had refused money to finance further operations of the District Civilian War Services Unit on the ground that its program "substantially duplicates and encroaches" on the work of existing agencies, Mr. Foster declares that his agency does nothing but "coordinate" other agencies.

"We do not want to displace the local Chamber of Commerce, the County Tuberculosis Association, the Retail Merchants Association, the local Fire



THREADS THAT LIVES MAY HANG ON

When wars were fought at a slower pace, it is said that "for want of a nail" a shoe, a horse, a rider, a battle and finally a kingdom were lost.

Little things can be just as vital in the war today—things as humble, for example, as the nuts which hold fighting aircraft staunch and tight.

The lives of flying crews may hang on the threads of nuts which stay put—hold fast against the chatter of gunfire, the throb of pulsing engines, the wrack and twist and vibration of massive wings wheeling and twisting through thin air.

We make such a nut. We have made more than three billion of them. And as far as is known, not a single one of these nuts has ever failed in service.

It is the special virtue of Elastic Stop Nuts that they never loosen, slip, shake off or break.

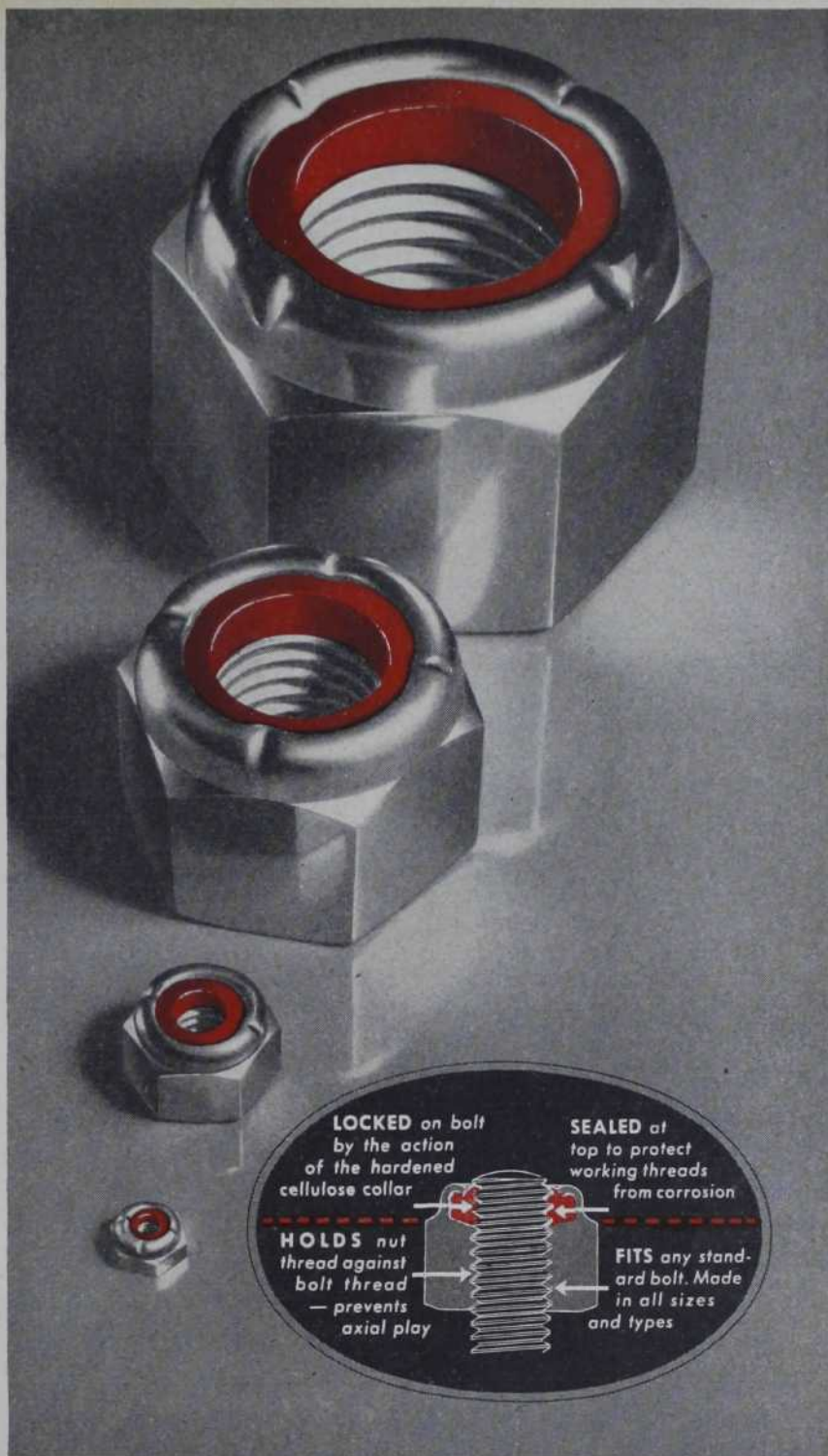
Small wonder they are used on every airplane made in the United States and Canada—as many as 50,000 may be used in a single ship.

Some day these nuts will be available for purposes other than the grim jobs of war.

When they are, automobiles will be tighter and safer and quieter—everything from garden tools or farm tractors to radios and vacuum cleaners will give longer and less troublesome service.

But that's for the future. Today, all these tenacious nuts we can make go for an even more important purpose—which is the simple task of holding tight till the war is won.

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UNION, NEW JERSEY



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working threads
from corrosion

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Radio sets will last longer, keep a truer tone, with Elastic Stop Nuts holding important fastenings firm and tight.



When regular nuts loosen, cars squeak. So look ahead to quieter automobiles after victory is won.



On a lawn mower, ordinary nuts may loosen, fall off, get lost in deep grass. Elastic Stop Nuts stay put.



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Precision Double Edge Blades

10 blades \$1.
and WORTH it

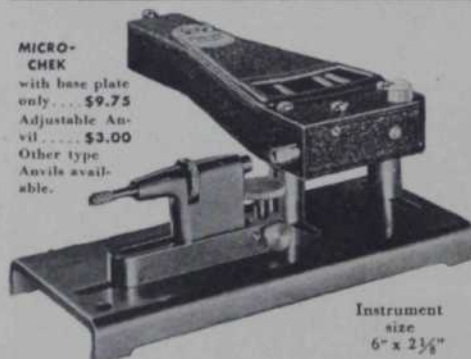
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Instrument size
6" x 2 1/4"

Less fatigue, faster inspections, are speeding up the gaging of millions of precision parts in more than 2500 war plants now using the TRICO MICRO-CHEK. Its advantages:

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TRICO

Write for illustrated booklet showing many applications of Micro-Cheks.

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Room 55 Trico Building
Buffalo, N. Y.

Prevention Council, or any other organization," he says. "We merely want to coordinate them."

"Our agency's sole job was—and is—to coordinate the work of all private and public welfare and social organizations to solve the community war problems in a unified manner and to take the Government's own problems to the people in a coordinated, understandable manner."

Coordinating the work of the 2,240 government agencies represents one of Mr. Foster's biggest headaches. For example, suppose a city faces the problem of providing day nurseries for children of women working in war plants. Three government agencies (besides OCD) are ready to rush to the scene. These are the Office of Defense Health and Welfare Services of the War Manpower Commission, the Children's Bureau of the Department of Labor, and the Federal Works Administration, which enters the race through diversion of Lanham Act funds to day nursery financing.

Besides these, there are thousands of private day nurseries in America, operated for profit. Oddly, in many towns, parents prefer private day nurseries to those established by government agencies. Perverse citizens of a Kentucky town, it is reported, failed to patronize a day nursery established by the WMC.

Mr. Foster and his army try to "coordinate" these things. Just how, is somewhat unclear, but Mr. Foster, listed with the Civil Service Commission as a "chief political adviser" to the Office of Emergency Management (under the executive office of the President) at \$8,000 a year, admits that it is "a terrific task to coordinate the movements of all the varied groups of America."

When it is considered that for years

various churches have recommended community Christmas services in one church in each town, instead of three or four (with the resultant waste of electricity, money and effort), without notable success, one can understand what a task of "coordination" Mr. Foster and army have set out to perform. They want to "coordinate" thousands of organizations every day.

Mrs. Roosevelt founded Mr. Foster's army in May, 1941, when the OCD was set up by executive order. She called it "the Civilian Participation Branch." Eventually she turned it over to Jonathan Daniels, who called it the "War Mobilization Branch," until he departed to take a job as an anonymous presidential assistant at \$10,000 a year.

Mr. Foster took over the agency last December. He was at that time a liaison officer of OWI, attached to OCD. He was little known and, to date, has incurred no personal, governmental, political, or congressional enmity.

A native of Brookline, Mass., the son of a well-to-do father, he graduated from Harvard in 1911, then went to Europe where he represented the Rockefeller Foundation until World War I broke out. In Germany in April, 1917, when America declared war, he hurried home to join the Army.

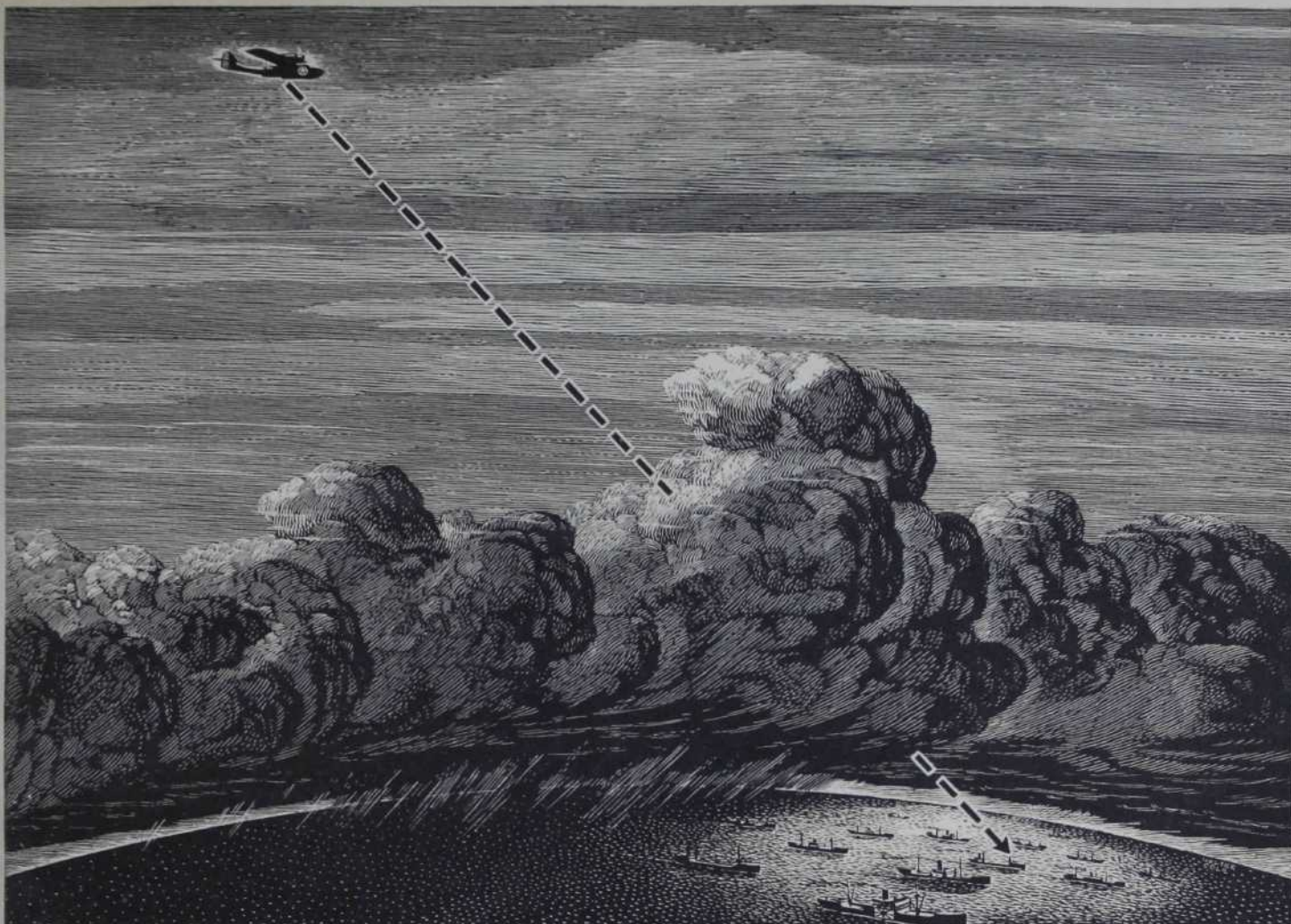
The war over, he became European representative of the Bankers Trust Company of New York, later being London representative of Spencer, Trask & Company, Boston investment bankers. He became a partner in 1938, when he returned to America.

He came first to Washington to work in February, 1942, with Archibald MacLeish's Office of Facts and Figures. When OFF went on the rocks, Mr. Foster went to OWI.

He is rather happy to know that he



"Young man, are those your ceiling prices?"



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struck, Philco was ready to answer the call of our fighting forces for "*impossible*" deeds of Radar development and production. Today, theirs is the most dramatic story that has yet been told from the annals of war production.

Even more important will be the peacetime sequel to these Radar achievements. In radio, television, refrigeration and air conditioning, only the future can reveal the untold progress that will appear under the famous Philco name . . . when peace is made secure.

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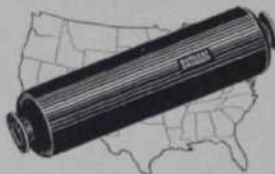
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"Do Not Disturb" is the first law of a hotel for its sleeping guests. It might seem strange, therefore, that a hotel would operate two Diesel engines in its basement. It is possible only because Burgess Snubbers eliminate the nuisance of exhaust noise.

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You'll find Burgess Snubbers everywhere, because Diesel engine operators everywhere want quiet exhausts. Snubbers are found from coast to coast in such locations as:

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Originators of snubbing principle for quieting Diesel exhausts

BURGESS DIESEL EXHAUST SNUBBERS



BUY MORE UNITED STATES WAR BONDS

has followed in Mr. Daniels' footsteps—and speaking of Mr. Daniels' promotion, he says:

"Wouldn't you jump at the chance to be an adviser to President Roosevelt?"

Most of the men under him today are professors, or former social workers. A recent interviewer asked:

"How did you, an investment banker, get ahead of them in a government agency?"

He replied, "Oh, we must have some leaven in the bread, y'know."

The head of America's largest volunteer army in history is 53 years old, lean and wiry. He has a thin face, slickly-combed-back, graying hair, and dresses meticulously. Pin-stripe breeches accentuate his slenderness. He thinks and speaks quickly.

Two divisions

MR. Foster's army is divided into two divisions—one, the Defense Council Division, and the other, the Organizations' Service Division. All these leaders make \$5,000 a year or more.

Heading the Defense Council Division is Thomas M. Devine, who for 25 years had been in Community Chest Work before coming to Washington to coordinate the local defense councils that hastily sprang into being after Pearl Harbor, designed to coordinate the work of other organizations.

Under Mr. Devine are four sections: the War Services Section, the Training Section, the Block Organization Section and the Volunteer Offices Section.

Chief of the War Services Section is Herbert L. Gutterson, only executive in Mr. Foster's division to be listed in *Who's Who in America*, where he catalogues himself as a Republican.

Among other things, Mr. Gutterson went to Williams and Harvard Colleges and was a member of the staff of Herbert Hoover in Europe on American Relief Administration after the last war. His principal work in the War Services Section today is handling general organizational problems.

Leader of the Training Section is Gordon Blackwell, former professor of social science at the University of North Carolina. His work has two important phases: He has charge of "in-training" paid workers at OCD and of training the millions of volunteers.

Glenn Jackson, a director of the Block Organizations Section, hails from New York, where he was a member of the staff of the New York State War Council and, before that, in social welfare work. It is his duty to see that the various block leaders know what they are talking about when they try to explain point rationing, how to buy war bonds, or save grease.

Leader of the Volunteer Offices Section is Miss Wilmer Shields, former administrative associate of the Association of Junior Leagues of America, and previously executive secretary of the Council of Social Agencies in New Orleans, instructor in child welfare at Tulane University, and research secretary for the High School Scholarship

Association of New Orleans. Miss Shields' job, which takes up two pages of fine print in a classification booklet, has to do with volunteer social work.

This completes the set-up immediately under the Defense Council Division.

Head of the Organizations' Services Division is Walter H. C. Laves, on leave from the University of Chicago, where he was director of social science surveys and taught political science.

The why branch

MR. FOSTER calls this division "the why branch." It has four sections—the Community War Information Section, the Speakers' Section, the National Organizations Section and the Program Services Section.

The Community War Information Section (which must not be confused with the state set-ups under OWI) is under Kenneth P. Vinsel who, among other things, used to be director of public welfare in Louisville, Ky. He was head of the department of history and political science at the University of Louisville.

Mr. Vinsel has a new government competitor in the Office of Community War Information, set up in May by Paul V. McNutt. Just what Mr. Vinsel's section does at OCD must be explained by someone else. Mr. Foster's explanation that it is in the "why branch" satisfies us.

Leader of the Speakers Section is Donald Hayworth, former head of the department of speech at the University of Michigan, who prefers that OCD orators be billed as "victory speakers."

The National Organizations Section is headed by Hal W. Hazelrig, who was in the public relations field for some time before taking his present job. He says he is always ready with "interpretive and consultative" services for all organizations—civic, social, political, or fraternal. That means he has 500 national organizations alone which he must "coordinate" to the war program.

Heading the Program Services Section is Francis Wilcox, another University of Louisville political science professor, who was with Rockefeller's Office of Coordinator of Inter-American Affairs before going to OCD.

Not all the paid employees of the Civilian War Services Branch are in the Dupont Circle Apartments. The OCD has divided the nation into nine regions each with its paid representative. Under these regional directors, serve volunteer state directors; under them serve county and city directors; and under them are the block leaders.

For their guidance, and yours, the OCD's Division of Public Advice and Counsel in Washington has printed more than 2,000 different OCD publications since May, 1941.

Mr. Foster discounts all the talk that the Civilian War Services Branch of OCD represents "the New Deal's attempt to set up its own local chambers of commerce." He laughs at the idea and says that his job will end the day the war is over—or, at the latest, six months thereafter.



America's Finest stop at the BUTLER HOUSE



"We are stopping at the Butler House," said one American doughboy shortwave broadcasting from Iceland. Many a letter from Alaska to the tropics have mentioned the comfort and liveability of these half-round military quarters.

Butler engineers and metal crafters receive news of Butler Houses with great satisfaction. Comfort was held uppermost in mind in designing and factory-fabricating living quarters for America's finest people, our armed forces going abroad. Critical steel had to be conserved. So, strength great enough to carry earth embankment against the side walls for bomb protection was engineered into light gage steel. Compact, sectionized construction was necessary to ship by rail, water and

air in the smallest possible space. Speedy erection and ready application of plenty of insulation was a prime factor.

From more than 25 years of know-how in the manufacture of steel buildings, came mass production of Butler steel military quarters that defy the heat of desert sun, the blasts of arctic blizzards and the monsoons of tropic jungles.

When the last gun is fired to end global war, the world will continue to benefit from the war sharpened skill of Butler metal crafters. As we produce for war we plan for peace.



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Summary of

Various Current Proposals for Post-War International Economic Action

This current publication summarizes proposals being made currently in the United States and some of the other United Nations.

10 cents

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**Foreign Commerce Department
Chamber of Commerce of the U. S. A.
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living standards, rather than universal advancement.

In the circumstances, it is futile for politicians to make long-term plans for dividing the spoils without more accurate knowledge of the raw material supply, which must constitute the base of any economic pyramid of prosperity. The threat of eventual shortages of basic metals and other fundamental resources belies the assumption that the national economy, having matured, can now readily be administered by routine bureaucrats, instead of by pioneering, venturesome and resourceful individuals.

Encourage wildcats

SINCE a new age of discovery is needed, it is essential to keep alive the incentives which will encourage new wildcatting, new pioneering and new exertion of the inventive talents of scientists and engineers. In these circumstances, the tax laws, the aspersions on the profit motive, and the whole overweighting of the enterprise system through excessive ante-ing up for the ever-rising cost of government need to be re-examined.

Unless we compensate for the tremendous cost of the war with prudent and constructive collaboration between government and business, dire necessity may force us away from national economic independence and relative self-containment.

Perhaps zinc will become the scarcest product but, among the more important, copper requires special consideration. In respect to the non-ferrous metals, the chief executive of one of the most important American metal companies recently told me:

"Speaking broadly from my knowledge of the ore reserves of various of the larger mines—not all of them but most of them—I would say that, at the present rate of extraction, production would necessarily begin to go down because of exhaustion of mines within less than five years, the decline increasing thereafter almost yearly until—after ten or 12 years—only four or five of the present mines in each of the metals, copper, lead and zinc, will survive. These would mostly be the largest mines now in operation. Already production is kept up only by paying increasing premium prices for production of many marginal mines.

"The United States has known metal resources which could be operated at higher prices. For example, say at 25 cents for copper, 12 cents for lead and 15 cents or more for zinc, present mine production could, in time, be expanded somewhat. But the new mines coming in would be mostly relatively small veins and deposits, and I doubt if even at such prices the new production would fully equal that of mines which will become exhausted within the next ten years if operated at capacity.

"Few people not acquainted with the business realize how rapidly this war is exhausting our reserves in copper, lead and zinc. Nor is there much chance that

large new deposits will be discovered. The United States has been thoroughly explored. It is possible that some big deposits have never approached near enough to the surface to be discovered. It may be that electrical and other methods of exploration below the surface—such as have been used for oil—may be developed to find such reserves. This is possible but I do not think we have sufficient reason as yet to regard it as probable.

"In short, should another world war occur after 25 years, the United States would have to rely on foreign nations, to a large extent, for its copper, lead and zinc. It will be relatively a "have-not" nation in this respect.

"There are known copper reserves in South America (Chile and Peru) and in Rhodesia and the Belgian Congo. Zinc and lead would have to come from Australia, Canada and Mexico. But, as a matter of fact, what I have said about the United States mines would probably apply to some of the largest foreign properties over a 25-year period. Doubtless new mines of major importance will be found also in the as yet unexplored parts of South America, Africa and Asia."

Aluminum is going

THE war has also brought tremendous expansion in the field of lighter metals, especially aluminum. The domestic reserves of what is called the commercial grade of bauxite may be fairly well exhausted in two years if the present rate of extraction continues. Domestic reserves of this type of bauxite in Arkansas have been estimated at 6,000,000 tons. Four tons of bauxite yield two tons of alumina and two tons of alumina turn into one ton of aluminum. At present, the country is using up bauxite at the rate of 3,500,000 tons a year. In addition to the domestic supply, bauxite is also imported from Dutch Guiana.

The Bureau of Mines has reported recent discovery of 6,000,000 tons of new high-grade bauxite deposits in Arkansas. These deposits, however, are widely scattered, buried deep and are not considered of much immediate commercial value.

Twenty-five years of industrial research has developed a technique for using low-grade bauxite, also abundant in Arkansas. The industry thinks that these ores will be of future importance, although at present it takes six tons of such bauxite to produce one ton of aluminum.

The industry has always considered the Dutch Guiana reserves better than those which can be mined in quantity within the United States, and has tended to conserve the Arkansas supply as an emergency reserve.

Despite the development of new and lighter metals and plastics, this is still the age of steel. In war-time the nation's steel mills have been producing the basic metal in quantities never before attained.

One eminent engineer has precipitated much debate by observing that ten years

of depletion at the current rate would exhaust the high grade iron ore reserves. In Minnesota, of course, there are vast secondary reserves of inferior ore, extraction of which would be more expensive.

With its holdings through subsidiaries in the Mesabi Range in Minnesota and additional reserves in Alabama, the United States Steel Corporation is commonly recognized as in a more comfortable position than the independents. Republic Steel, for future protection, has acquired ore reserves in the Adirondack Mountains in New York; and Bethlehem Steel in Colombia, South America. My impression is that the insiders regard the ten-year forecast as unduly pessimistic. Some seem to think that the known high grade domestic iron ore will last at least two and a half times that long, but even a quarter of a century is a short time in the history of the nation.

Likewise, the current extraordinary rate of using nickel has led to the report that the present inventory of known raw materials for that metal would last only another ten years.

George W. Malone, Reno, Nevada, engineer, who has served as special consultant for the Senate subcommittee on "Strategic and Critical Materials," of which Senator Thomas of Utah is Chairman, believes that the country has important reserves of lower grade metal in the 11 western states. To make such resources available, Mr. Malone advocates economic and price policies which will restore the profit motive to the realm of wildcatting and discovery. Mr. Malone told me that prevailing federal mineral policies are self-defeating.

In the forestry field, the trade estimates that the known timber supply would last about 29 years at the current rate of use and losses from all causes. As an offset to usage, there is the growth factor which quantitatively is designed almost to offset depletion, although it should be pointed out that there is much low quality growth while high quality trees are being heavily depleted. The trade proposes to compensate for this by greater adaptations in the uses of wood fiber and cellulose.

Four horses per worker

OF course, such "freedom from want" as we have thus far attained in the United States has been facilitated by rising productivity made possible by supplementing human work with mechanical energy. In 1880 we reinforced the average worker with six-tenths of a horsepower; by 1940 this was raised to 4.5 horsepower. Meantime, *per capita* output rose from five tons of product in 1880 to some 20 tons in 1940.

In war and in peace, gasoline is of growing importance. The present usage of 4,000,000 barrels a day represents about the pre-war consumption. Civilian usage has been drastically curtailed to make petroleum products available for military requirements. Even so, experts in the oil industry indicate that present known reserves in the United States

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would support the current rate of consumption for only between 18 and 48 months.

In the past, the industry has always met the ever-normal crisis of expanding demand through discoveries of new wells on the one hand, and through better utilization of crude oil, on the other. Present war-time restrictions on manpower and materials have noticeably reduced wildcatting, and experienced men in the industry tell me that discoveries result only through the drilling of many exploratory wells. At this time, there is interest in new wells in West Texas. Though this field has not yet been proven, it could potentially add ten to 15 per cent to our oil reserves.

Practical geologists in the industry believe that price and general economic policies can result in a revival of oil discovery within the United States. They point out that American supplies can also be supplemented by imports and, eventually, in case of a general shortage, they foresee that oil can be extracted from shale, or manufactured through hydrogenation of coal, which is abundant, through a process known in this country and already in use in Germany.

As offsets to the current prodigious depletion of raw material assets, we should remember that not all of the products are gravitating to destructive uses. Some are being detoured into stockpiles, and a large amount will eventually return to the nation's inventory in the form of scrap.

Nevertheless, in dreaming about the future, we should recognize that, if we begin to approach exhaustion of any of our basic mineral resources, an important ingredient for national prosperity will have been removed.

Sermon in facts

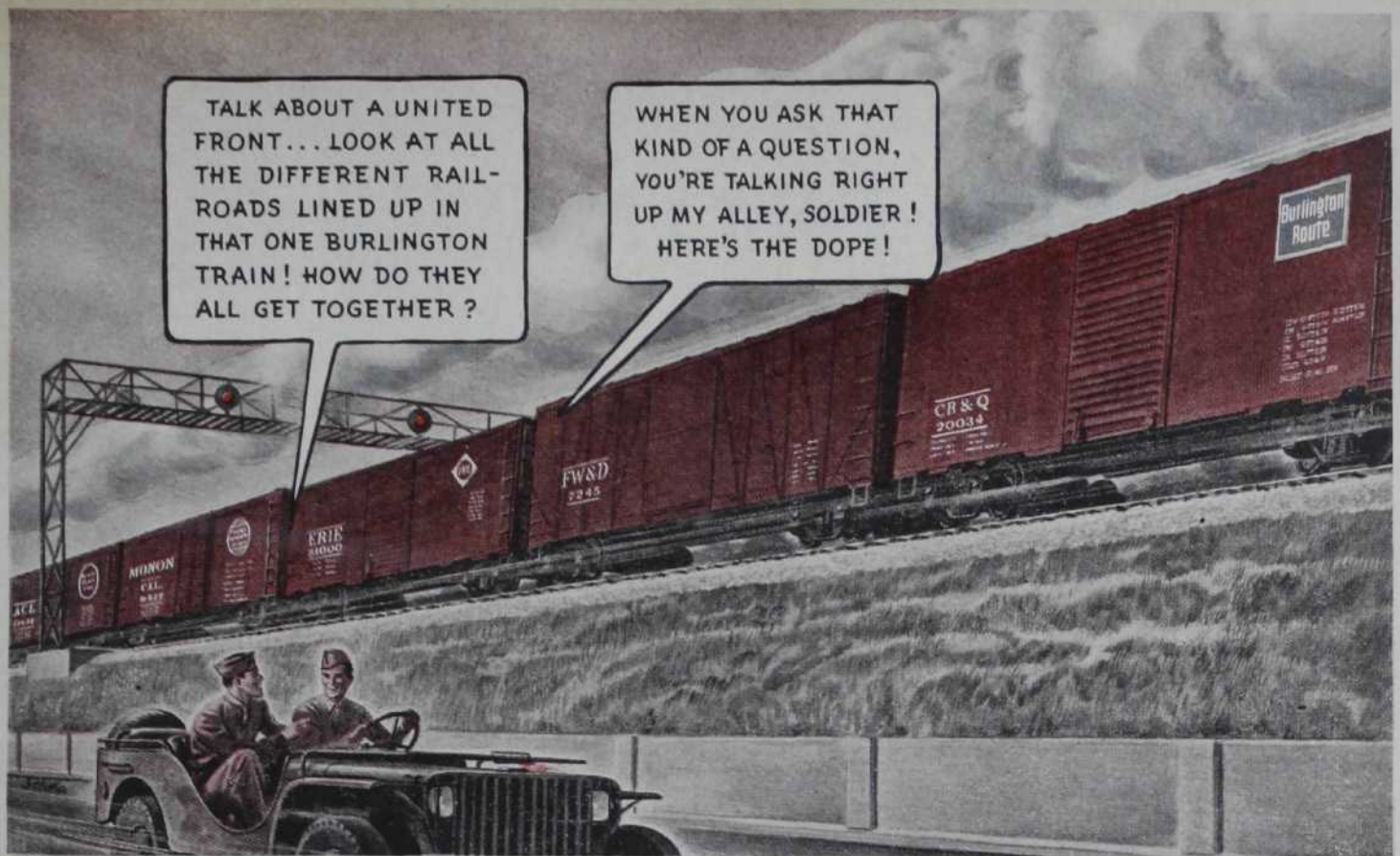
CONTRASTS in the way government treated itself as manager of the nation's railroads in the second year of World War I, as against the way it treats private management in this second year of World War II, are shown in a study by *Railway Age*.

In 1918, the Government granted itself a \$1,000,000,000 increase in passenger and freight rates. In 1943, the Government ordered private management to reduce freight rates by \$300,000,000.

During the last war, government increased its railroad taxes only \$10,000,000. The increase so far in this war—principally federal—is \$655,000,000.

In the first quarter of 1918, under government management, freight cars in service increased 3.4 per cent, while freight traffic handled declined 2.6 per cent. In the first quarter of 1943, under private management, freight cars increased four per cent but freight handled increased 27 per cent.

Which kind of management do the taxpayers want?



Sgt.— See that map at the bottom of the page? See all those lines which connect with each other to form a network over the whole country? Those lines are railroads. The red ones are the Burlington. The black ones are a lot of other railroads, each serving a particular part of the country.

Pvt.— I get it—the red lines hook up with the black lines in every direction, don't they?

Sgt.— Right—and that's why you see the cars of so many different railroads in that Burlington train—in every Burlington train. Actually, the

Burlington is a link between railroads of the North, East, South and West.

Pvt.— I can see from the map that it covers a lot of important territory, all right.

Sgt.— Yes, the Burlington Lines total 11,000 miles in 13 states—some of them agricultural, some of them industrial, and *all* of them mighty important in winning this war. But it isn't just size that makes it such an essential link. Another big reason is that the Burlington serves 22 major gateways and has a lot of interchange points within its territory.

Pvt.— What's an interchange point?

Sgt.— A place where freight cars are switched from one railroad to another.

Pvt.— Say, how come you know so much about railroads?

Sgt.— That's easy, my dad's a railroader.

Pvt.— Not a Burlington railroader, by any chance?

Sgt.— How'd you guess it? Yes, he's been with the Burlington for over twenty years, and he's every bit as proud of his job as I am of mine.

That's right, Sergeant. Your dad and more than 35,000 other Burlington workers are proud to be among the armies of railroaders that have teamed up to do the biggest transportation job, both freight and passenger, in history.



AN ESSENTIAL LINK IN TRANSCONTINENTAL TRANSPORTATION

We Tour the HOME FRONT

They've "found" thousands of tons of copper at the Buick Division of General Motors Corp. and they are producing large caliber steel shell cases without, in effect, dipping into the nation's steel supply. Officials reported enough steel is being saved in the forging processes on aircraft engines and tank parts to meet steel shell case requirements at top production.

As a patriotic move in connection with the national "Victory Garden" program, the golf-course built for employees of the Ilg Electric Ventilating Co., Chicago, is being plowed up and divided into garden plots for Ilg workers.

General Electric Company and associated companies employ 9,222 from 325 domestic colleges and from foreign colleges in 34 countries.

The number of inventions originated by employees of Westinghouse Electric and Manufacturing Co. in 1942 increased 30 per cent over 1941.

In 1942 the Bullard Co., Bridgeport, Conn., machine tools production totalled 250 per cent of the previous year's output and was ten times that of their peak year.

Curtiss-Wright Corp., New York City, acquired a New Jersey factory for its newly organized development division formed to anticipate development of new products and new markets in the post-war period.

Sylvania Electric Products, Inc., Salem, Mass., received the Grand Trophy, first prize in the accident reduction contest of 307 firms in Massachusetts. The working period represented 3,332,000 man-hours without lost-time accident.

Mechanized equipment for the armed forces can now cross safely on the lightest bridges known because of plywood and adhesive treadways for pontoon bridges developed by the Plaskon Corp.

Former workers of the Package Machinery Company, Springfield, Mass., now receive personal chatty notes from the company president who considers this a valuable activity now to better post-war employee relations.

The 750 employees of American Bantam Car Co. have a Victory Vegetable Farm with a skilled manager (recruited from ranks of their employees). A few

farm-wise employees will go on the vegetable shift two days a week at their regular pay.

A simple altitude test chamber for aircraft radio developed by RCA Victor Division of Radio Corporation of America enables engineers for the first time to see the entire operations under conditions duplicating the stratosphere seven and one-half miles up.

Those busy fingers which have been folding surgical dressings for the Red Cross may soon be released for other work. E. I. Dupont De Nemours have a device which folds surgical dressings three to five times faster than by hand.

A combination shower and bath using almost no critical materials, primarily for low-cost houses and war homes has been developed by Pittsburgh Plate Glass Co., Pittsburgh. Results are so pleasing in appearance that utility designers see promising future even after the war.

A novel help wanted advertisement for white collar workers for the Victory shift from 6 PM to 11 PM Monday through Friday, brought 2,000 men who waited for four hours for an interview at the Macallen Co., South Boston, Mass.

Aided by Brazilian and Mexican cotton linters, the Hopewell, Va., plant of Hercules Powder Company has expanded production 200 per cent since the outbreak of the war.

A new Houdry Catalytic cracking unit by Gulf Oil Corp., at Port Arthur, Texas, brought that company's expenditures to \$15,000,000 for increasing aviation gas facilities at that plant.

To reveal instantly any attempt to tamper with fire extinguishers American-Lafrance-Foamite Corp., Elmira, N. Y., has introduced a new inexpensive extinguisher case constructed of non-critical cardboard stock. It safely houses the extinguisher from the reach of unauthorized persons and yet allows instant removal for legitimate use.

Pure silver is now being used in making special war-time "tin cans" . . . 16 cents worth of silver solders 1,000 No. 2 cans.

A body dusting powder will protect overseas personnel against typhus-carrying pests. Already millions of two-ounce cans have been manufactured by E. I. Dupont de Nemours and put in soldiers' packs.

Completion and full-time operation of Columbia Steel Co.'s new continuous rod mill at the Pittsburg, Cal., works marks another finished step in the United States Steel Corp.'s \$700,000,000 war expansion program.

Olive drab bugles for the U. S. Army are now being molded of plastic saving almost two pounds of brass, a critical material, on each bugle made.

An "assembly-line" salvage system saves 1,000,000 pounds of steel shavings and cuttings each month at the Eclipse-Pioneer division of Bendix Aviation Corp.

Willys Overland Motors has designed an engine "bed-warmer" for U. S. Army Jeeps permitting instant starting even when vehicle has been standing overnight in temperatures as low as 40 degrees below zero.

Cooper-Bessemer Corporation is using Meehanite Metal to replace brass in the production of propeller castings reducing production costs as much as 50 per cent in addition to conserving a substantial tonnage of critical brass.

Houses that fly, designed by the U. S. Army and Air Corps Engineers, will be fabricated by the Butler Manufacturing Co., Kansas City, Mo. These prefabricated buildings will be flown to the erection site complete in every detail.

Food for the company-owned and operated cafeteria will come from the 650 acre tract leased by the Denison Engineering Co., Columbus. Half of the land will be cultivated, the other half used for raising poultry, sheep, cattle and hogs. Any surplus food will be sold to the employees at reasonable prices.

An outstandingly low absenteeism ratio of 2.5 per cent has been made by the 6,100 employees of Lukens Steel Co., Coatesville, Pa.

Legal Aid for Military Personnel—Program of free legal aid for military personnel at home and overseas, announced by War Department.

A Library on Welding, believed to be the most extensive in existence, has been established at Ohio State University, the gift of Mr. A. F. Davis, vice president and secretary of the Lincoln Electric Co., Cleveland.

Marching to jobs to the strains of bugles and saluting the flag emphasize employees' role of soldiers of production at the Marmon-Harrington Co., Inc., Indianapolis.

Chemists are promising two more contributions to automobile transportation after the war—40-mile-per-gallon gasoline and Nylon tire cords of unparalleled strength will be available.

Would you trust this man?

(Case No. 199,267 from U. S. F. & G. files)

A southern real estate company trusted him. And why not? He was secretary of the concern . . . employed for over 15 years . . . enjoyed an irreproachable reputation . . . was married and had several children. Yet he embezzled nearly \$30,000! Fortunately he was bonded through U. S. F. & G., so his company was spared financial loss.

Appearance, reputation, background provide no absolute clue to character. The only sure protection against embezzlement losses lies in insurance, and when an insurance company is willing to write fidelity bonds covering your employees that is a tribute to their honesty and integrity. If your company has not reviewed its bonding program in the light of today's employment problems, we suggest that you do so at once.

Illustrated on this page are other cases, showing some of the hazards that demand insurance protection as a safeguard against financial loss. Your local U. S. F. & G. agent will be glad to make an audit of your present insurance program to help guard against wartime risks. He is one of thousands serving communities great and small throughout the United States, its possessions, and Canada. Consult him today.

U.S.F.&G.

UNITED STATES FIDELITY & GUARANTY CO.

affiliate:

FIDELITY & GUARANTY FIRE CORPORATION

HOME OFFICES: BALTIMORE, MD.
BRANCH OFFICES IN 43 CITIES



Consult your insurance agent or broker as you would your doctor or lawyer

(Case No. 1-B-3524)

Robber makes off with payroll

It was an unhappy payday for the employees of the dress manufacturing concern when the robber held up the bookkeeper and made off with the \$2,140.49 payroll. But thanks to payroll insurance, the concern suffered no loss and the employees received their pay. Crime usually increases during a war. Are you protected against such losses?



(Case No. 21-G-1326)

Tire spins stone through window

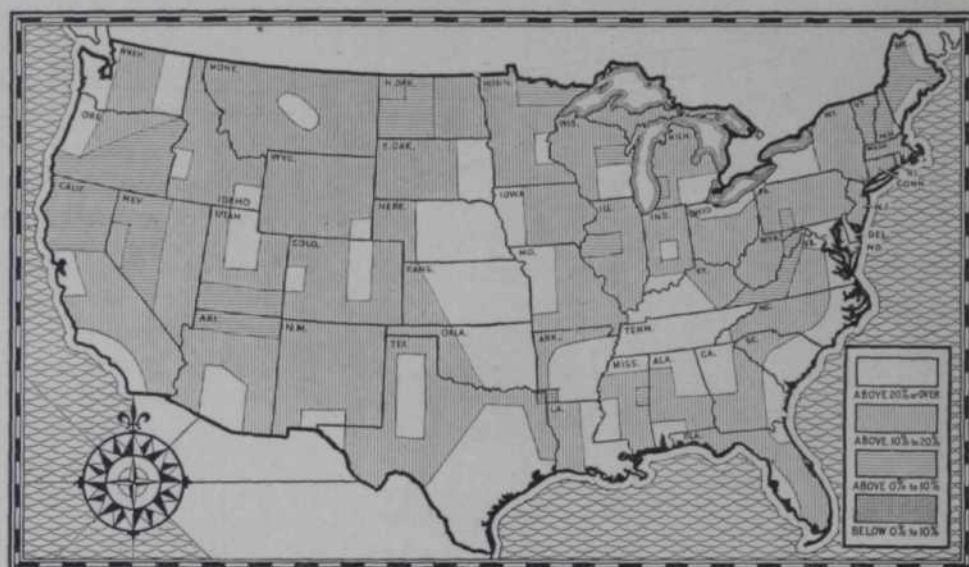
One moment the proprietor of the Pennsylvania store was sitting peacefully in his shop . . . and the next, his display window was shattered to bits. The cause: a stone kicked up by a passing car. The cure: plate glass insurance with U.S.F.&G. who replaced the window and saved the shopkeeper loss. Are your windows, glass doors, or display cases similarly protected?



The Map of the Nation's Business

By FRANK GREENE

Dr. Goebbels Predicted Paralysis



INDUSTRIAL activity in April moved to slightly higher levels as steel production in the last week ran to highest output on record. Airplane and merchant shipbuilding also made new highs. Railroad prosperity continued, with carloadings higher than in March, while motor carriers' volume was 21 per cent above a year ago. Electric power output rose contra-seasonally with a gain of 18 per cent above a year ago. Engineering awards declined to less than half of those for April, 1942, as war plant expansion slowed. Military demands reduced oil and gasoline stocks to a critically low level on the Atlantic coast.

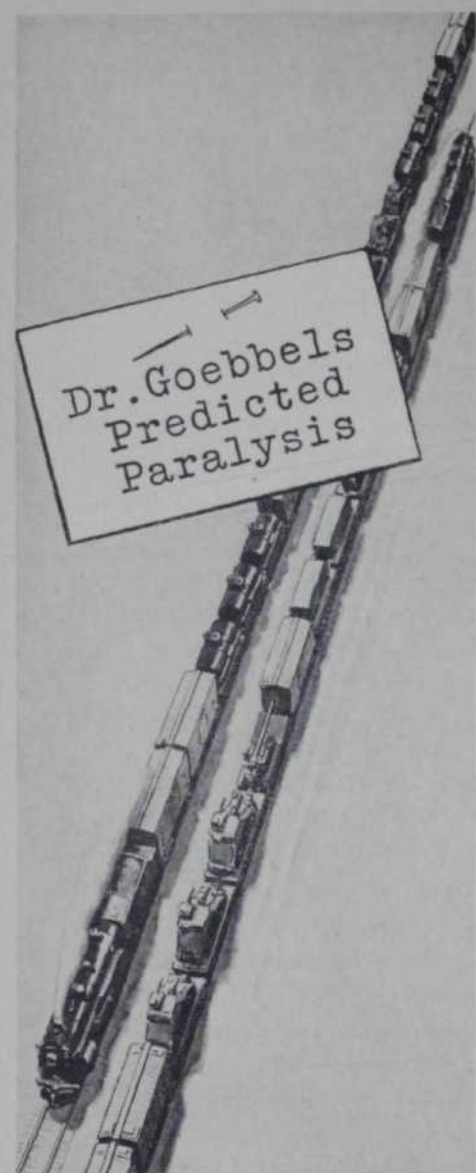
The Second War Loan was oversubscribed, while volume of bank clearings was highest since 1930. Security dealings were heavy with prices somewhat lower as the result of the Government wage and price program and the threat of a soft coal strike.

Heavy consumer buying, reflecting peak employment and high farm income, causes further improvement in the Map



The map of last month

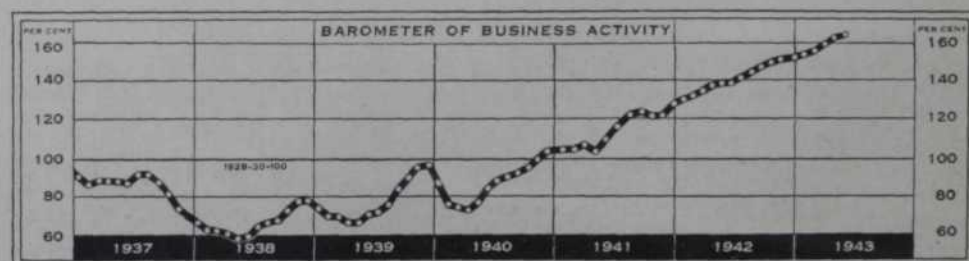
The commodity price index held at a peak level despite weakening cattle and hog markets. Wholesale and retail trade suffered from shrinking inventories although Easter volume was the largest for many years.



The American railroad transportation system will be paralyzed with its tremendous wartime burden—that's what the enemy said. How different the record! Frisco, along with all other American railroads, is carrying the greatest passenger and freight loads in history—and carrying them promptly, safely, efficiently. No, Dr. Goebbels, there will be no paralysis of rail transportation in freedom-loving America!



ONE OF AMERICA'S RAILROADS
—ALL UNITED FOR VICTORY



Continuing its uninterrupted rise, the Barometer reached a new high in April with output of war industries holding at record levels

NATION'S BUSINESS for June, 1943

Now, more than ever

YOU'VE GOT TO
SPEND MONEY
TO MAKE MONEY

BUY MORE
V
WAR BONDS

GEORGE S. MAY COMPANY

CHICAGO
May Building
2600 North Shore Ave.

Business Engineering

CANADA: 320 Bay St., Toronto

NEW YORK
Chanin Building
122 East 42nd Street

OFFICES IN PRINCIPAL CITIES

Sealing the last-minute sting in a bomb



A "block buster" bomb is harmless . . . until someone opens a "tin can."

This can contains the bomb's sting—a fuse. Without it no bomb can explode. At the last minute before a raid, the fuse is taken from the can and shoved into the nose of the bomb.

This fuse has to be *right* when it goes into the bomb. That's why it's packed in a can.

A damp fuse could turn a costly bomb into a worthless dud. But the

"bomb fuse" can, moisture-proof and air-tight, keeps each fuse safe and dry until it's needed.

Vital materials like this are riding off to war by the millions in America's favorite container. They—and the can—are working for American boys, helping them do a job and come out on top. The essential things you get in cans—food, fuel, medicine—are also going to the fighting fronts in cans.

Cans are tough. They don't break,

chip or tear. They protect against water, dirt, light, insects. Things get there—*safe*—in cans.

The can that goes to war today will be back again . . . guarding the things you depend on. It'll be better than ever, thanks to the experience we're gaining as packaging headquarters for the boys in uniform.

NOTE

TO WAR MANUFACTURERS

Metal containers are delivering the goods *safely*—foods, supplies, and bullets arrive ready for action. Continental is making millions of these cans along with other war needs, including plane parts.

Yet, rushed as we are, we can still take on more! Right now, a part of our vast metal-working facilities for forming, stamping, machining and assembly is still available. Write or phone our War Products Council, 100 East 42nd Street, New York.

CONTINENTAL CAN COMPANY

It gets there—safe—in cans



**HELP CAN THE AXIS—BUY
WAR BONDS**